

## SBU : Greases & Lubricants P-43, HIDE ROAD EXTENSION KOLKATA – 700 088

## TENDER ENQUIRY

Tender No. : GLK/TE17/216

Date : 2.11.2017

Due date : 16.11.2017 at 15.00 hours [IST]

### Sub: <u>Design, Supply, Drawing, Fabrication, Testing, Supply, Installation &</u> <u>Commissioning of Electrical DB Panel for Administration Building at G&L-Kolkata with</u> <u>accessories :</u>

Online electronic offers are invited from contractors of repute having strong financial background and meeting pre-qualification criteria for supply of Electrical DB Panel – (one unit) as per Specifications & Scope of work, General terms & conditions, and HSE Schedule attached in Annexure - A, B & C respectively.

If the tenderer find any discrepancy, omission, ambiguity or conflict in or among the documents forwarded or be in doubt as to their meaning and interpretations, such matter shall be brought to the attention of us, at least four working days prior to the due date of the Tender. However no change in price/value shall be allowed after placement of the order or during the execution of work at site.

The bidders are requested to kindly check all technical parameters and made a site visit, if required, and acquaint themselves before quoting against the same. For any clarification, please contact

Mr. Rohit Agarwal Associate Vice President (Operation) Tel : 033 24505430 e-mail id : agrawal.rk@balmerlawrie.com

The bidders are requested to submit their offer on-line before the due date and time of the tender.

Thanking you,

Yours faithfully, for **Balmer Lawrie & Co. Ltd.** 

(Arnab Ghatak) Sr. Manager (Central Procurement)



Encl.: As above

Annexure-A

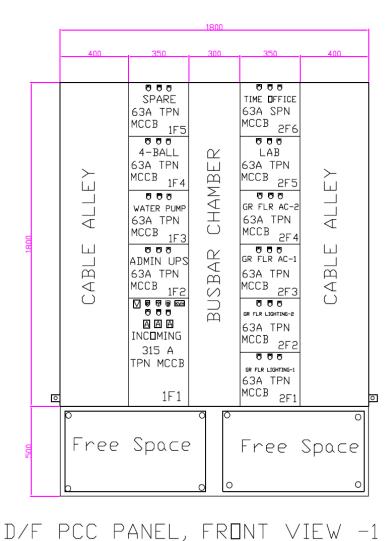
## 1.0 Design data & Spec. for 315A Admin Building DB Panel Consisting of –

1.1 Panel shall be designed for IP - 52 Degree of Protection.

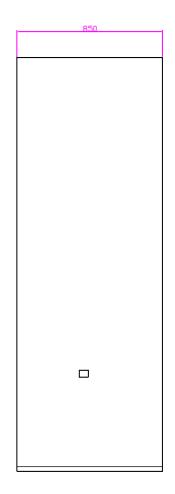
1.2 Sheet Steel thickness shall be 2 mm thick CRCA and Gland plate thickness shall be 3 mm.

- 1.2 Panel shall be free standing, floor mounting, double front, non draw out execution.
- 1.3 Cable entry / exit shall be from bottom. Necessary cable alley shall be provided in each vertical section as per drawing given with this enquiry.
- 1.4 The pane surface must be pretreated through 7 / 9 tank treatment process before painting and dried in heat chamber. Painting by Powder Coating paint and dried in heat chamber by Electro static method.
- 1.5 The panel shall have 75 mm integral channel and removable lifting lugs as required.
- 1.6 Rear cover door shall be provided for inspection of busbar and easy cabling.
- 1.7 Electrolytic grade Aluminum shall be considered. The busbar size to be selected 1.25 % of incomer feeder rating for phase and Neutral shall be 50 % of phase busbar.
- 1.8 Vertical Busbar System shall be supported on FRP / DMC base insulator with antitracking facility. Phase & Neutral busbar shall have uniform cross section throughout the length.
- 1.9 Proper colour code to be provided by PVC Heat Shrink sleeves.
- 1.10 Horizontal earth busbar of size 50 x 6 mm shall be provided along the length of the panel.
- 1.11 All wiring for power , control , metering & indication shall be done with 1.1 KV grade, PVC insulated, stranded copper wire / Aluminum Flat.
- 1.12 Power wiring size shall be 25 sq mm. copper wire for each feeder .
- 1.13 For control circuit, CT circuit shall be wired with 2.5 sq.mm & rest with 1.5 sq.mm.
- 1.14 Control circuit will be 230 V AC.
- 1.15 Each wire shall have ferrules & lugs at both end.
- 1.16 Control, metering & indication circuit wire shall be neatly bunched / run through PVC wire channel and adequately supported so as to prevent stress and strain on termination end.
- 1.17 Anodized Aluminum name plate shall be provided for main / feeders.
- 1.18 Danger plate shall be provided at front and rear of the panel.
- 1.19 Power terminals shall be stud & nut type / Aluminum flat and the same shall be selected as per the incoming & outgoing cable size.
- 1.20 Control terminal shall be Clip-on type , size 2.5 <u>sq.mm</u>.
- 1.21 All live parts shall fully covered by FRP / Bakelite sheet to prevent accidental touch.
- 1.22 Each component inside the module / door shall be identified by stickers / paint.
- 1.23 component MCCB: Schneider/Siemens, CT : Kappa, Meters : AE / L&T, KWH meter : Schneider EM100, Lamp & Push Button : Esbee (L&T), MCB : ABB / Legrand/Siemens.
- 1.24 Wire : L&T / Finolex / Havells
- 1.25 PCC feeder list with rating & Qty is as per drawing attached.



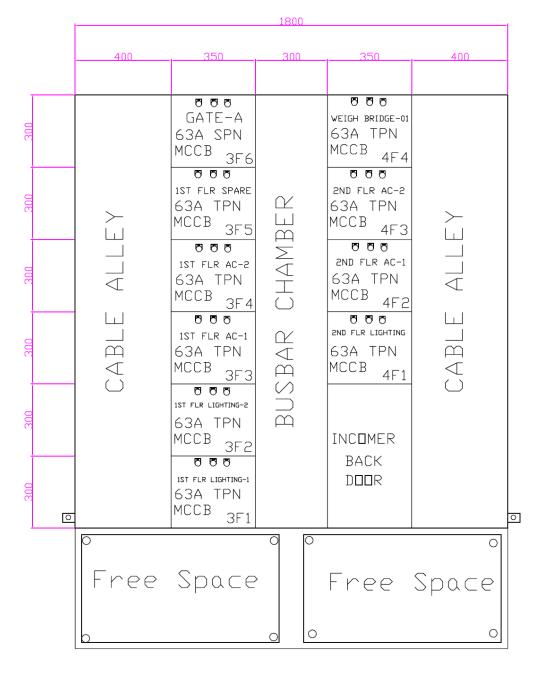


GA Drawing of the PCC panel: (for tender purpose)



SIDE VIEW





D/F PCC PANEL, FRONT VIEW -2



## 2.0. <u>Tests</u>

- 2.1 All equipments shall be completely assembled, wired, Routine tested as per IS 8623 (part-1): 1993 at the vendor's factory as per Approved Drawings.
- 2.2 Also the following tests will be conducted in the presence of owner's representative.
- 2.2.1 The test shall include operation under simulated service condition to ensure Correctness of scheme, Wiring.
- 2.2.2 High voltage test.
- 2.2.3 Certified reports of all test carried out at works shall be furnished.
- 2.2.4 Copies of Manufacturer type test certificate of major Bought out items shall be furnished.
- 2.2.5 Insulation resistance test.

## 3.0 Scope of work of Balmer Lawrie & Co. Ltd.

- 3.1 Construction Panel trench: to be done by BL if required.
- 3.2 **Electrical supply**: Free within battery limit. Suitable rating power socket DB will be provided. Extension if required shall be arranged by the party.
- 3.3 **Storage:** BL shall provide space for storage of equipments, raw material etc. The vendor at his own cost shall arrange temporary partition doors etc if required.
- 3.4 **Security:** No special security other than normal plant security shall be provided.

## 4.0 Scope of Work of Vendor:

A. Supply, Installation, testing & commissioning (SITC) of the following: Note: Major installation/cabling/wiring work is to be taken on Sunday/holiday



SL. NO.	Supply, Installation, testing & commissioning of the following	Qty.	UOM	Make
1	Supply, installation, testing, commissioning (SITC) of 415 V, 315A floor mounted MCC Panel for Admin Building as per spec/drawing given in tender	1	Set	Component make as specified in tender for panel
2	SITC of 3.5C x 240 sq mm,1.1 KV XLPE Insulated, armoured stranded Aluminium cable	260	Mtr.	Polycab/Mescab/Cr istal/Gloster/Havell
3	SITC of 3.5C x 25 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured , extruded PVC outer sheathed stranded copper	500	Mtr.	s/approved eqv.
4	SITC of 4C x 10 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured, extruded PVC outer sheathed stranded copper cable	200	Mtr.	
5	SITC of 2C x 6 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured, extruded PVC outer sheathed stranded copper cable	200	Mtr.	
6	SITC of Single / Double Compression gland for 3.5C X 240 sq mm Cable.	2	Nos.	Dowels/Janson
7	SITC of Double Compression brass gland for 3.5C X 25 sq mm Cable.	25	Nos.	Dowels/Janson
8	SITC of Double Compression brass gland for 4C X 10 sq mm Cable.	4	Nos.	Dowels/Janson
9	SITC of Double Compression brass gland for 2C X 6 sq mm Cable.	4	Nos.	Dowels/Janson
10	SITC of Aluminium Cable Socket Flat Type 240 mm	8	Nos.	Dowels/Janson
11	SITC of Aluminium Cable Socket Flat Type 120 mm	4	Nos.	Dowels/Janson
12	SITC of Copper Cable Socket Flat Type 25 mm.	100	Nos.	Dowels/Janson
13	SITC of Copper Cable Socket bullet Type 25 mm.	100	Nos.	Dowels/Janson
14	SITC of 8 -Way TPN MCB Box with Cover/ double door. (Each Phase 8 SP MCB+ Incomer)	12	Nos.	Legrand
15	SITC of 4 Pole 63A, Isolator	6	Nos.	Legrand
16	SITC of 4 Pole 63A, RCBO, 30mA	8	Nos.	Legrand
17	SITC of Single Pole MCB, C Curve, 32 A	10	Nos.	Legrand
18	SITC of Single Pole MCB, C Curve, 25 A	20	Nos.	Legrand
19	SITC of Single Pole MCB, C Curve, 20 A	40	Nos.	Legrand
20	SITC of Single Pole MCB, C Curve, 16 A	20	Nos.	Legrand
21	SITC of Single Pole MCB, C Curve, 10 A	20	Nos.	Legrand
22	SITC of Single Pole MCB, C Curve, 6 A	30	Nos.	Legrand
23	SITC of PVC Blanking plate for MCB	50	Nos.	
24	SITC of Mtls for COPPER PLATE 600X600X3.2 MM Eartting as per IS 3043	2	Set	
23	SITC of G.I Strip 50 x 6	100	KG	
32	SITC of G.I Cable Tray 250 x 50 MM	50	Mtr.	
33	SITC of Anchor Fastener 150 X 8 MM	200	Nos.	
34	SITC of G.I Tray Fixing Base 250 x 50 x 50 x 50 MM	80	Nos.	
35	SITC of Misc. consumable/PVC tapes etc to complete the job	1	Lot	



В.	Misc.	dismantling	&	allied	job:
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SL. NO	Job work required	Qty.	UNI T
36	Dismantling & shifting of 2C X 2.5 Sq mm Cable incl. Terminations	60	Mtr.
37	Dismantling & shifting of 3.5C X 95 Sq mm Cable	95	Mtr.
38	Dismantling & shifting of 3.5C X 50 Sq mm Cable incl. Terminations	140	Mtr.
39	Dismantling & shifting of 3.5C X 35 Sq mm Cable incl. Terminations	50	Mtr.
40	Dismantling & shifting of 4C X 10 Sq mm Cable incl. Terminations	25	Mtr.
41	Dismantling & shifting of 100A Main Switch incl. Terminations	4	Nos.
42	Dismantling & shifting of MCB DB Box incl. Terminations	5	Nos.
43	Dismantling & shifting of BUS-BAR DB Box incl. Terminations	2	Nos.
44	Wall drilling/pocket cutting for cable entry & plastering/filling with cement motor as required	15	Nos.



## General Terms & Conditions

## 4.1 **Submission of offer**

Bidder shall submit their online electronic bid in **TWO** parts within the due date and time of the tender without any deviation of technical specifications. Also send Hard Copy of Technical bid (Annexure 'A') along with all necessary supporting documents, EMD amount and Tender document **(without price)**.

Please do not leave any space blank or incomplete and write NA/NIL/Free in such case(s). Each page of the offer (enclosures) has to be acknowledged by the bidder with their acceptance (signature & company stamp). In case of offer, which are not found in line with our guidelines and Terms & Conditions, may subject to rejection. Only the technically Qualified bidders (Technical specifications, scope of work, HSE practice & submission of EMD in line with tender documents) shall be considered for price bid evaluation.

#### 4.2 Basis of selection and Allocation of order qty

The basis of selection of vendors and allocation of order shall be as under.

- a) The price offers of only the technically successful bidders will be considered for further evaluation for placement of order.
- b) The on-line closed bids shall be used for grading the bidders .The lowest quoted bidder on net landed basis in the on-line closed bids shall be designated as "L1" and the next lowest quoted bidder as "L2" and so on in the grading system.
- c) Orders will be placed for 100% quantity on L1 vendor in totality (technically accepted).
- d) The bidders have no right to claim / disclaim or dispute anything during / in this process.

#### 4.3 Earnest Money Deposit (EMD)

An amount of Rs. 10,000 (Rupees Ten thousand only) as EMD is to be submitted alongwith the bid by means of Pay Order / Demand Draft in favour of Balmer Lawrie & Co. Ltd. payable at Kolkata.

The EMD of the successful bidder will be returned after submission of Security Deposit within 15 days from the date of receipt of purchase order failing which the EMD will be forfeited.

EMD of the unsuccessful bidder(s) will be returned to the respective bidders once the tender is finalized and acceptance of order by the successful bidder.

No interest will be payable against this EMD.

Public Sector Undertakings and Micro & Small scale manufacturing & Service enterprises registered MSME/ NSIC/ SSI units are exempted from payment of EMD. However, they should enclose a copy of their valid registration certificate to make their bid eligible for consideration.



Technical bid received from tenderers' without EMD will not be considered.

#### 4.4 Security Deposit (SD)

The successful bidder upon receipt of order must submit a security deposit of 5% of the basic order value valid till end of supply and successful commissioning of the equipment.

The SD is payable by means of Pay Order / Demand Draft payable at Kolkata and in favour of Balmer Lawrie & Co. Ltd. or in the form of bank guarantee from any Scheduled Bank as per format of BL. No interest will be payable against this SD.

Public Sector Undertakings and registered MSME/ NSIC/ SSI units are exempted from payment of SD.

#### 4.5 **Acceptance of offer & Placement of Order**

Balmer Lawrie & Co. Ltd. (BL) reserves the right to reject/accept all or any tender(s). A tenderer must have to quote for all the items/heads under supply for this tender. Purchase order will be placed on a single technically & commercially qualified bidder, whose total price of subject tender stands lowest. **Only technically qualified bids shall be considered for price bid evaluation.** 

#### 4.6 **Completion period**

The delivery of complete set of DB Panel is to be made within 12 weeks from the date of placement of PO/LOI whichever is earlier.

The installation and commissioning of the DB Panel should be completed within 4 weeks from the date of site clearance by BL.

The completion period should be 16 weeks in totality from the date of LOI/PO.

### 4.7 After sales service

Bidder shall furnish the contact details of after sales service facility available in and around Kolkata and has to submit a declaration for the availability of all 'Spare/assembly parts' of the supplied DB Panel for at least next five years for replacement and / or maintenance.

#### 4.8 **Price schedule**

The price shall be quoted as per online specified format.

#### 4.9 **Payment terms**



- (i) 60% of basic order value with applicable taxes and duties for the entire contract value will be released within 30 days from the date of supply.
- (ii) 30% of basic order value with applicable taxes and duties for the entire contract will be released after installation and commissioning and submission of related documents.
- (iii) Balance 10 % of basic order value shall be kept as retention money & will be released after completion of guarantee period without any interest or against submission of Performance Bank Guarantee (on BL format) for equal amount.

## 4.10 **Performance Bank Guarantee (PBG)**

PBG may be furnished in lieu of retention money in specified format of BL and shall be valid for the entire guarantee period from the date of successful commissioning of the complete DB Panel.

## 4.11 Guarantee/Warranty Period

12 (twelve) months from the date of successful commissioning or 18 (eighteen) months from the date of supply of complete unit whichever is earlier.

During this guarantee period the performance of the supplied & commissioned item has to be in line with the expected / agreed quality as per tender/PO and if not then vendor has to replace/rectify the same at no extra cost to BL to the satisfaction of BL.

#### 4.12 Validity of offer

The offers shall remain valid for a period of 90 days from the due date of the tender.

#### 4.13 **Documentation**

The bidders(s) **<u>MUST</u>** submit the following:

- (i) <u>During tender submission (hard copy)</u>
- (a) GA Drawing with complete technical details & calculation for the proposed DB Panel.
  - (ii) <u>After placement of order</u>
    - (a) Civil Foundation Drawing.
    - (b) Detail drawing with GA and sectional drawing.
    - (c) List of items and quantity with brief specifications and make, wherever applicable.
  - (iii) <u>During Commissioning</u>
    - (a) Operation and maintenance manual of the supplied item/system (two sets).
    - (b) All "Test Certificate" of various components.



#### 4.14 Liquidated Damages

In case of failure to deliver the item (of acceptable quality) by the successful vendor, as per the completion period, a pre-determined liquidated damages @  $\frac{1}{2}$ % per week of the basic order value subject to a maximum of 5% of the basic order value shall be deducted from the invoice of the contractor.

## 4.15 Working days & hours

All work required to be carried at BL's site, shall be done only during working days from Monday to Saturday between 8:30 A.M. and 5:00 P.M.

## 4.16 Factory Rule

The successful bidder have to abide by the BL factory rules and regulations. Only adult and skilled workmen with necessary PPEs shall be allowed to work in BL premises.

## 4.17 Jurisdiction

All disputes are subject to Kolkata jurisdiction.

## 5.0.0 Undertakings and Obligations of Contractor

## 5.1.0 Care of works

- 5.1.1 Proper care shall be taken during transport, erection, commissioning and testing of the equipment to avoid damage to item/equipment and properties and injury to persons.
- 5.1.2 The supply material shall be dispatched to the site duly packed (as required) with instructions. The material shall be delivered in good condition, necessary scaffolding, lifting tools and tackles to be used for loading, unloading and shifting of heavy equipment and material shall be provided by the contractor.
- 5.1.3 Contractor shall remove all wreckage, rubbish etc. from site and stack the wastage at the space allotted for the purpose. On completion of the works, the contractor will keep the space clean and fit for occupation to the satisfaction of the company and demolish store, remove all debris, waste and surplus material supplied/created by them. In case the contractor does not maintain good housekeeping, the company has the right to get the work done and debit the cost to the contractor.
- 5.1.4 All necessary safety measures & PPTs are to be taken care.

#### 5.2.0 Insurance

The contractor shall cover the following insurance till the complete job is handed over.

5.2.1 All workmen/ persons employed by the contractor and subcontractor against accident, injury & death.



- 5.2.2 All material and entire installation against loss or damage during transit.
- 5.2.3 Vendor shall comply with all procedural requirements as defined in the insurance policy to ensure that it is alive till the successful execution and handing over of site back to BL.

#### 5.3.0 Safety Rules and Guidelines

- 5.3.1 Proper safety precautions and measures to be taken care of on the principle of "Safety comes first" during the entire contract period. The contractor shall be bound to bear any claim or compensation for the accidents, injury and death arising out of negligence on their part to ensure such safety measures including the expenditure for defense legal proceedings.
- 5.3.2 Care shall be taken to provide and maintain the safety measures and statutory safety rules and act in force by contractor.
- 5.3.4 All safety requirements depending on the nature of work should be provided to minimize the occurrence of accidents.

## 5.4.0 Statutory rules and regulations

Please note that this is a contract for work and accordingly all liability pertaining to this contract including those of the people engaged by the contractor solely rests upon the contractor. The contractor should also indemnify the Company against any deviation from the statutory rules and regulations to be observed by the contractor in respect of their people. ESI/PF/Minimum Wages and all other statutory liabilities shall be borne by the contractor.

Contact Person :

Contact Number :

Signature	with	official	

## Procedure for Bid Submission

The bidder shall submit their response through bid submission to the tender on e-Procurement platform at <u>https://balmerlawrie.eproc.in</u> by following the procedure given below.

#### **Registration with e-Procurement platform:**

For registration and online bid submission bidders may contact HELP DESK of M/s C1 India Pvt., Ltd., or they can register themselves online by logging in to the website <u>https://balmerlawrie.eproc.in</u>

## Digital Certificate authentication



The bidder shall authenticate the bid with his Digital Certificate for submitting the bid electronically on e-Procurement platform and the bids not authenticated by digital certificate of the bidder will not be accepted on the e-Procurement platform.

# All the bidders who do not have Digital Certificates need to obtain Digital Certificate. You may contact Help Desk of C1 India Pvt Ltd.

## M/s C1 India Pvt Ltd.

C 104, Sector - 2, Noida 201 301. You may also get in touch with their representative

Mr. Ritabrata Chakraborty [e-mail id <u>ritabrata.chakrabortv@c1india.com</u>, Cell No. 09748708094 alternately you may contact

Mr. Ravi Gaiwal e-mail id- ravi.gaiwal@c1india.com, Phone: 022 – 6686 5633

Mr. Tirtha Das, e-mail id : tirtha.das@c1india.com , Contact No: +91-9163254290

## **Bid Submission Acknowledgement**

The user should complete all the processes and steps required for bid submission. The successful bid submission can be ascertained once acknowledgement is given by the system through bid submission number after completing all the processes and steps. Tender Inviting Authority and C1 India Pvt. Ltd. will not be responsible for incomplete bid submission by users. Users may also note that the incomplete bids will not be saved by the system and are not available for the Tender Inviting Authority for processing.

#### Note :

a) Vendor has to be certified to ISO 9001 latest version

b) Vendor to conform to all applicable legal (statutory and regulatory) requirements

c) Vendor to provide test certificate with each lot.

d) Bids of any tenderer may be rejected if a conflict of interest between the bidders and Company is detected at any stage.

## Last date for submission of on line bid 16.11.2017 upto 15.00 Hours [IST]

## for Balmer Lawrie & Co. Ltd.

(Arnab Ghatak) Sr. Manager (Central Procurement)



#### HSE Chapter

In order to achieve the tender goal in a very smooth & SAFE manner, all the bidders are required to comply with this HSE chapter, before, during and after the tender finalization or related job execution, in following prescribed procedure :

#### Annexure C 1

## Pre-Qualification Questionnaire for Contractor

#### Guidelines for Completion of Questionnaire

- i. The potential bidder is to ensure that the answers provided are focussed against the activities indicated in the pre-tender document.
- ii. The information is supplied in the same format and sequence in which they appear in the questionnaire. A minimum of 12 has to be obtained in the HSE pre-qualification questionnaire.
- iii. Failure to supply information that accurately and fully covers the material requested may result in an individual Contractor failing to meet minimum expectations and therefore being disqualified.
- iv. Contractor shall provide information that is authentic and documentary evidence.
- v. Even after getting pre-qualified, if it comes to the notice that non-authentic documents are provided, the Contractor may be disqualified and if any Contract is in place, it may be terminated immediately.
- vi. BL shall have right to audit Contractors records to verify the authenticity of the documents, during any phase of the Contract.



## **Questionnaire for HSE Pre-Qualifications of contractors :**

Contactor Details						
Company Name						
Contact Person for HSE :						
Name						
Cell Number						
e-mail address						

		Resp	onse	Evidence Required	Weightage
	Question	Yes	No	at bidding Stage	if complied
	Do you have a signed and dated HSE Policy?			Attach HSE Policy	1
	Do you confirm that you will comply with BL HSE Policy in as much as it is applicable to your scope of work?			None	1
3	Do you have a Health and Safety System certified by an accredited body to a recognized standard? (e.g : OHSAS 18001)			Provide Current Certificate	3
4	Do you have an Environmental Management System Certified by an accredited body to a recognized standard? (e.g : ISO 14001)			Provide Current Certificate	3
5	Have you identified, documented and maintained your Health and Safety risk assessment of your activities?			None	3
	Have you identified, documented and maintained your Environmental Impact Assessment of your activities?			None	3
	If you use subcontractors, will you assess them in terms of HSE?			None	2
	Have you produced project/contract HSE plans for recently completed work?			None	2
9	Is HSE Covered in your company's organization chart?			Provide Current Org Chart.	2
10	Have HSE roles and responsibilities been defined in your company?			None	2
	Have your employees received documented HSE training appropriate to the task they will undertake?			None	2
	Do you identify and monitor compliance with HSE Legislation?			None	2
	Do you carry out regular medical examination for your employees?			None	1



	Resp	onse	Evidence Required	Weightage
Question		No	at bidding Stage	if complied
Is your company free from any charges or notices served by the regulatory authorities in relation to HSE in the last 3 years?			None	1
Do you have any procedure of reporting HSE Incident and investigation?			None	2

Please provide your accide the current year and the las calendar years Note: this n include the data of any con working for your organizat	st 2 nust itractors	Current Year	Current Year 1	Current Year 2	Period Average (Three years average)	
16 Number of Fatalities						
	17 Number of Environmental Incidents reported to Pollution Control Board					
18 Number of accidents with 2 c days lost time.( LTI)	or more					
19 Man Days Lost						
20 Total Hours Worked						
I confirm that the above informa	ation is corre	ect and th	hat further evi	idence to su	oport this will	
be provided to BL on request.						
Name	Position	Co	Company		Signature	

## Annexure – C2

## HSE Requirements BY CONTRACTORS

(To be a part of contract document)

## 1.0 Housekeeping

Contractors shall ensure that their work area is kept clean tidy and free from debris. The work areas must be cleaned on a daily basis. Any disposal of waste shall be done by the Contractor.

All equipment, materials and vehicles shall be stored in an orderly manner. Access to emergency equipment, exits, telephones, safety showers, eye washes, fire extinguishers, pull boxes, fire hoses, etc. shall not be blocked or disturbed.

## 2.0 Confined Space

Before commencing Work in a confined space the Contractor must obtain from BL a Permit to Work, the Permit to Work will define the requirements to be followed.

As minimum Contractors must ensure the following:



- i. Confined spaces are kept identified and marked by a sign near the entrance(s).
- ii. Adequate ventilation is provided
- iii. Adequate emergency provisions are in place
- iv. Appropriate air monitoring is performed to ensure oxygen is above 20%.
- v. Persons are provided with Confined Space training.
- vi. All necessary equipment and support personnel required to enter a Confined Space is provided.

## 3.0 Tools, Equipment and Machinery

The Contractor must ensure that all tools & equipment provided for use during the Work is:

- i. suitable for its intended use
- ii. safe for use, maintained in a safe condition and where necessary inspected to ensure this remains the case (any inspection must be carried out by a competent person and records shall be available);
- iii. Used only by people who have received adequate information, instruction and training to use the tool or equipment.
- iv. Provided with Earth leakage circuit breaker (ELCBs) at all times when using electric power cords. Use of electrical tape for temporary repairs is prohibited.

## 4.0 Working at Height

Any Work undertaken where there is a risk of fall and injury is considered to be working at height.

For any Contractor Personnel working at height, Contractors shall provide fall prevention whenever possible and fall protection only when fall prevention is not practicable. Before commencing Work in a height the Contractor must obtain from BL a Permit to Work, the Permit to Work will define the requirements to be followed. Supervisor must be present at all point of time, to ensure no deviation occur during the course of work.

#### Fall Prevention System

Fall prevention systems (e.g. fixed guardrails, scaffolds, elevated work platforms) must provide protection for areas with open sides, including exposed floor openings.

#### Fall Protection Systems

Where fall protection systems are used then the Contractor must ensure the following is applied:

- i. Only approved full body harness and two shock-absorbing lanyards are used,
- ii. Prior establishment of a rescue plan for the immediate rescue of an employee in the event they experience a fall while using the system,
- iii. Anchorage points must be at waist level or higher; and capable of supporting at least the attached weight,
- iv. Lifeline systems must be approved by BL before use.
- v. Use of ISI marked industrial helmet at all point of time.



## 5.0 Scaffolding

All scaffolds shall subject to a documented inspection by a competent person and clearly marked prior to use. The footings or anchorage for scaffolds shall be sound, rigid and capable of carrying the maximum intended load without settling or displacement. All scaffolding materials should be of MS tubular type.

Guardrails and toe-boards shall be installed on all open sides and ends of scaffold platforms. Scaffolds shall be provided with an access ladder or equivalent safe access. Contractor Personnel shall not climb or work from scaffold handrails, mid-rails or brace members.

## 6.0 Stairways and Ladders

Ladders should only be used for light duty, short-term work or access in line with the below and the Site Requirements.

- i. Fabricated ladders are prohibited.
- ii. Ladders will be secured to keep them from shifting, slipping, being knocked or blown over.
- iii. Ladders will never be tied to facility services piping, conduits, or ventilation ducting.
- iv. Ladders will be lowered and securely stored at the end of each workday.
- v. Ladders shall be maintained free of oil, grease and other slipping hazards
- vi. Ladders will be visually inspected by a competent person and approved for use before being put into service. Each user shall inspect ladders visually before using.
- vii. Ladders with structural defects shall be tagged "Do Not Use," immediately taken out of service, and removed from the Site by the end of the day.

## 7.0 Roof Work/Access

Roof work and access to roofs must not be undertaken without prior authorization from BL.

#### 8.0 Overhead Work

A secure exclusion zone shall be maintained by Contractor below overhead work to prevent access. It is forbidden to work beneath a suspended load.

## 9.0 Lifting Operations

#### Cranes and Hoisting Equipment

Contractors shall operate and maintain cranes and hoisting equipment in accordance with manufacturers' specifications and legal requirements.

Only Contractor Personnel trained in the use of cranes and hoists are permitted to use them.

#### **10.0 Lifting Equipment and Accessories**

All lifting equipment / accessories e.g., slings, chains, webbing, chain blocks, winches, jacks etc shall be indicated with their safe working load have an identification number visible on the unit and be inspected and tested in accordance with legal requirements.



Damaged equipment / accessories and equipment shall be tagged "out of use" and immediately removed from Site.

#### 11.0 Lockout Tag out ("LOTO")

Prior to performing work on machines or equipment, the Contractor shall ensure that it is familiar with LOTO and Permit to Work procedures and that all of its affected Contractor Personnel receive the necessary training.

### 12.0 Barricades

Floor openings, stairwells, platforms and walkways, and trenching where a person can fall any distance shall be adequately barricaded and where necessary, well lit. Where there is a risk of injury from a fall then rigid barriers must be used.

Barricades must also be used to prevent personnel entering an area where risk of injury is high e.g., during overhead work activity or electrical testing etc. Such barricading must provide clear visual warning.

## 13.0 Compressed Gas Cylinders

Gas cylinder shall be securely stored and transported, and identified and used in line with the local requirements. Hose lines shall be inspected and tested for leaks in line with local requirements. Flash Back arrestor to be used to prevent any explosion due to back fire.

#### 14.0 Electrical Safety

Prior to undertaking any work on live electrical equipment the Contractor must obtain a Permit to Work from BL. Where ever possible live work should be avoided. Any control measures highlighted shall be implemented prior to work commencing.

The below measures will be taken :

- i. Work practices must protect against direct or indirect body contact by means of tools or materials and be suitable for work conditions and the exposed voltage level.
- ii. Energized panels will be closed after normal working hours and whenever they are unattended. Temporary wiring will be de-energized when not in use.
- iii. Only qualified electrical Contractor Personnel may enter substations and/or transformer and only after being specifically authorized by BL.

#### 15.0 Hot Works

A Permit to Work must be obtained from BL prior to any hot works (welding, grinding, open flame work). Suitable fire extinguishing equipment shall be immediately available. Objects to be welded, cut or heated shall be moved to a designated safe location, or, if they cannot be readily moved, all movable fire hazards in the vicinity shall be taken to a safe place. Personnel working around or below the hot works shall be protected from falling or flying objects.



Prior to the use of temporary propane or resistance heating devices approval must be obtained from BL.

## 16.0 Trenching, Excavating, Drilling and Concreting

A Permit to Work must be obtained from BL and all underground lines, equipment and electrical cables shall be identified and located prior to beginning the work. The Contractor shall assign a competent Contractor Personnel to all trenching and excavation work.

Safe means of access and egress shall be located in trench excavations. Daily inspections shall be conducted by a competent Contractor Personnel for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems or other hazardous conditions.

Physical barriers shall be placed around or over trenches and excavations. Flashing light barriers shall be provided at night.

#### **17.0** Environmental Requirements

#### Waste Management

The Contractor is responsible to remove any waste generated by the work being done on the Site. The Contractor must dispose of the waste in line with the relevant local legislative requirements. The waste disposal route shall be documented and made available for BL to review at any time and may be subject to BL's prior approval.

Wastes (includes rinse from washing of equipment, PPE, tools, etc.) are not to be poured into sinks, drains, toilets, or storm sewers, or onto the ground. Solid or liquid wastes that are hazardous or regulated in any way are not to be disposed of in general site waste receptacles.

#### Spills

The Contractor is responsible for the provision of adequate spill kits/protection and the clean-up and disposal costs arising from such spills.

#### 18.0 Emissions

The Contractor shall identify and quantify any emission sources associated with the Works. The control measures associated with these emission shall be subject to the approval of BL. Emissions include but are not limited to noise, dust, fumes, vapours.

#### Annexure – C 3

(To be filled after the job completion ONLY - by the job executor)

POST CONTRACT HSE EVALUATION						
Question	Answer (Yes /	Remarks				



		No)	
1	The contractor demonstrated the application of an effective and robust HSE management system.	-	
2	The contractor did not cause any additional cost or delays to the project through poor HSE performance.		
3	The contractor prepared suitable and sufficient HSE risk assessments and method statements in a capable, proactive and timely manner.		
4	The contractor proactively reported on HSE Events and Deviations.		
5	The contractor's workforce fulfilled their HSE roles and responsibilities.		
6	The contractor's own/subcontracted workforce demonstrated the required level of competency.		
7	The contractor demonstrated knowledge of and proactively ensured compliance with HSE legislation.		
8	All goods/materials/equipment/substances supplied by the contractor were compliant with the HSE requirements.		
9	The contractor ensured that appropriate and timely medical examinations were performed for his own/subcontracted workforce.		
10	The contractor proactively demonstrated housekeeping and cleanliness.		
11	The contractor demonstrated compliance with the Balmer Lawrie Contractors General Terms and Conditions.		
12	The contractor demonstrated control of high risk activities		
13	Number of accidents with 1 or more days lost time		
14	Fatalities during the Contract		
15	Man Day Lost		
16	Man Hours Worked		

Based on the overall HSE performance of the Contractor, the Contractor

- 1. Can be re deployed for future assignments
- 2. Needs extensive training & Counseling before reappointing
- 3. Cannot be considered for future assignments

## Sign of the Evaluator/Contract Manager Unit/ Project Head

Sign of the

Balmerol LUBRICANTS

## Price breakup Format :

- Vendors are requested to upload Price bid only in E-Portal & send all other supporting documents **except price bid format** in Hard Copy. (Refer clause no 4.1- Annexure 'B').
- In E-portal, bidders are requested to bid their price in supply part clubbing value of sl no 1 to 35 as total supply amount (of below table )& clubbing sl no 1 to 42 (of below table ) as total service amount.
- Price bid as per given below should be uploaded in E-Portal.
- During evaluation, price breakup shall be referred from the uploaded price breakup format in E-portal submitted by the respective bidders.

## **SUPPLY PART :**

SI.No.	Description	Qty [A]	UOM	Unit Rate (Rs/UOM) [B]	% GST [C]	GST amount (Rs/UOM) [D]	Total Basic + GST (Rs/UOM) [E]	Value [F= E X A]
1	Design, Drawing, Febrication, testing & Supply,of 415 V, 315A floor mounted MCC Panel for Admin Building as per spec/drawing given in tender	1	Set					
2	3.5C x 240 sq mm,1.1 KV XLPE Insulated, armoured stranded Aluminium cable	260	Mtr.					
3	3.5C x 25 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured, extruded PVC outer sheathed stranded copper cable	500	Mtr.					
4	4C x 10 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured, extruded PVC outer sheathed stranded copper cable	200	Mtr.					
5	2C x 6 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured, extruded PVC outer sheathed stranded copper cable	200	Mtr.					
6	Single / Double Compression gland for 3.5C X 240 sq mm Cable.	2	Nos.					
7	Double Compression brass gland for 3.5C X 25 sq mm Cable.	25	Nos.					



8	Double Compression brass gland for 4C X 10 sq mm Cable.	4	Nos.			
9	Double Compression brass gland for 2C X 6 sq mm Cable.	4	Nos.			
10	Aluminium Cable Socket Flat Type 240 mm	8	Nos.			
11	Aluminium Cable Socket Flat Type 120 mm	4	Nos.			
12	Copper Cable Socket Flat Type 25 mm.	100	Nos.			
13	Copper Cable Socket bullet Type 25 mm.	100	Nos.			
14	8 -Way TPN MCB Box with Cover/ double door. (Each Phase- 8 SP MCB+ Incomer)	12	Nos.			
15	4 Pole 63A, Isolator	6	Nos.			
16	4 Pole 63A, RCBO, 30mA	8	Nos.			
17	Single Pole MCB, C Curve, 32 A	10	Nos.			
18	Single Pole MCB, C Curve, 25 A	20	Nos.			
19	Single Pole MCB, C Curve, 20 A	40	Nos.			
20	Single Pole MCB, C Curve, 16 A	20	Nos.			
21	Single Pole MCB, C Curve, 10 A	20	Nos.			
22	Single Pole MCB, C Curve, 6 A	30	Nos.			
23	PVC Blanking plate for MCB	50	Nos.			
24	Mtls for COPPER PLATE 600X600X3.2 MM Eartting as per IS 3043	2	Set			
23	G.I Strip 50 x 6	100	KG			
32	G.I Cable Tray 250 x 50 MM	50	Mtr.			
33	Anchor Fastener 150 X 8 MM	200	Nos.			



34	G.I Tray Fixing Base 250 x 50 x 50 x 50 x 50 MM	80	Nos.			
35	Misc. consumable/PVC tapes etc to complete the job	1	Lot			

## **SERVICE PART :**

SI.No.	Description	Qty [A]	UOM	Unit Rate (Rs/UO M) [B]	% GST [C]	GST amount (Rs/UOM) [D]	Total Basic + GST (Rs/UOM) [B+D=E]	Value [F= E X A]
1	Installation, testing, commissioning (ITC) of 415 V, 315A floor mounted MCC Panel for Admin Building as per spec/drawing given in tender	1	Set					
2	ITC of 3.5C x 240 sq mm,1.1 KV XLPE Insulated, armoured stranded Aluminium cable	260	Mtr.					
3	ITC of 3.5C x 25 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured , extruded PVC outer sheathed stranded copper cable	500	Mtr.					
4	ITC of 4C x 10 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured , extruded PVC outer sheathed stranded copper cable	200	Mtr.					
5	ITC of 2C x 6 sq mm,1.1 KV XLPE Insulated, PVC inner sheathed, armoured , extruded PVC outer sheathed stranded copper cable	200	Mtr.					
6	ITC of Single / Double Compression gland for 3.5C X 240 sq mm Cable.	2	Nos.					
7	ITC of Double Compression brass gland for 3.5C X 25 sq mm Cable.	25	Nos.					
8	ITC of Double Compression brass gland for 4C X 10 sq mm Cable.	4	Nos.					
9	ITC of Double Compression brass gland for 2C X 6 sq mm Cable.	4	Nos.					
10	ITC of Aluminium Cable Socket Flat Type 240 mm	8	Nos.					



11	ITC of Aluminium Cable	4	Nos.			
	Socket Flat Type 120 mm ITC of Copper Cable Socket					
12	Flat Type 25 mm.	100	Nos.			
13	ITC of Copper Cable Socket bullet Type 25 mm.	100	Nos.			
14	ITC of 8 -Way TPN MCB Box with Cover/ double door. (Each Phase- 8 SP MCB+ Incomer)	12	Nos.			
15	ITC of 4 Pole 63A, Isolator	6	Nos.			
16	ITC of 4 Pole 63A, RCBO, 30mA	8	Nos.			
17	ITC of Single Pole MCB, C Curve, 32 A	10	Nos.			
18	ITC of Single Pole MCB, C Curve, 25 A	20	Nos.			
19	ITC of Single Pole MCB, C Curve, 20 A	40	Nos.			
20	ITC of Single Pole MCB, C Curve, 16 A	20	Nos.			
21	ITC of Single Pole MCB, C Curve, 10 A	20	Nos.			
22	ITC of Single Pole MCB, C Curve, 6 A	30	Nos.			
23	Installation of PVC Blanking plate for MCB	50	Nos.			
24	ITC of Mtls for COPPER PLATE 600X600X3.2 MM Eartting as per IS 3043	2	Set			
23	Installation of of G.I Strip 50 x 6	100	KG			
32	Installation of G.I Cable Tray 250 x 50 MM	50	Mtr.			
33	IT of G.I Tray Fixing Base 250 x 50 x 50 x 50 MM with fasteners	80	Nos.			
34	Dismantling & shifting of 2C X 2.5 Sq mm Cable incl. terminations	60	Mtr.			
35	Dismantling & shifting of 3.5C X 95 Sq mm Cable	95	Mtr.			
36	Dismantling & shifting of 3.5C X 50 Sq mm Cable incl. terminations	140	Mtr.			
37	Dismantling & shifting of 3.5C X 35 Sq mm Cable incl. terminations	50	Mtr.			
38	Dismantling & shifting of 4C X 10 Sq mm Cable incl. terminations	25	Mtr.			
39	Dismantling & shifting of 100A Main Switch incl. terminations	4	Nos.			
40	Dismantling & shifting of	5	Nos.			



	MCB DB Box incl. Terminations					
41	Dismantling & shifting of BUS-BAR DB Box incl. terminations	2	Nos.			
42	Wall drilling/pocket cutting for cable entry & plastering/filling with cement motor as required	15	Nos.			

