# BRAHMAPUTRA VALLEY FERTILIZER CORPORATION LIMITED

(A GOVT. OF INDIA UNDERTAKING)

NAMRUP



Please reply to:

Dy.General Manager(MM) BVFCL, Namrup P.O. Parbatpur – 786 623 Dist. Dibrugarh (Assam),India. CIN No: U24123AS2002GOI006786 GST No: 18AABCB9399R1ZK

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To.

M/s. As per approved hist-

NOTICE INVITING TENDER

1. NIT NO

AN/2018/64UE-003/333/RC/Eng- ()427

DATE OF ISSUE

23/06/2018

TYPE OF BID

Two Stage

4. BID OPENING

25/07/2018

5. EARNEST MONEY DEPOSIT

Rs.5000.00

BRAHMAPUTRA VALLEY FERTILIZER CORPORATION LIMITED, NAMRUP INVITES SEALED BID IN TWO STAGES FOR SUPPLY OF THE FOLLOWING ITEMS AS PER ANNEXURE- A, I&II.

SI. No.	DESCRIPTION	QUANTITY
1.	Manufacture, testing at works, installation & dispatch to site of Indoor Type 415 V AC motor control centre Panel in single front option for replacement of old SILO Scrapper MCC of Bagging – III Plant.  Details as under:  Annexure – A - Vendor's scope & BVFCL's scope.  Annexure—B – Single Line Diagram of the old and existing MCC.  Annexure –C - Specification of the required MCC.	01 No.

#### SPECIAL TERMS & CONDITIONS.

. The bid will include / indicate the following.

- a) The complete scope of supply conforming to the specifications stipulated above and at Annexure A and Annexure 1 & II,
- b) Basic Price, Packing & Forwarding charges, if any. The applicable GST and any other applicable charges,
- c) The mode of transportation and charges thereon for delivery of the materials at Namrup, Assam.
- d) Acceptance of terms of payment within 30 days as per Clause No. 7 of Annexure I of the NIT.
- e) Confirmation that the firm prices have been quoted.
- Confirmation of the bid validity for 90 days from the bid opening date.
- g) Please confirm that the material shall be guaranteed for a period of 18 months from the date of supply or 12 months from the date of commissioning, whichever is earlier and a certificate to this effect shall accompany along with the supply.
- h) Confirmation of furnishing Security Deposit cum Performance Bank Guarantee @ 10% of the order value valid for the entire guarantee period + delivery period + claim period of six months as per Clause No.6 of Annexure-I of the NIT.
- Please clearly indicate PAN/ GST No. in your quotation.
- j) Your Tender quotation must be accompanied by Earnest Money Deposit for an amount of Rs.5000.00 in the form of a crossed Demand Draft/Bank pay challan only in favour of Brahmaputra Valley Fertilizer Corporation Limited, payable at Namrup on any scheduled Bank payable at Namrup.
- k) Acceptance of all other terms & conditions of Annexure I &II
- The parties who are not registered as pre-qualified vendor of BVFCL will submit the documents pertaining to the eligibility criteria at point no. 19 of Annexure — I.
- a MSEs shall

3.

- a. MSEs shall be given the benefits of issue of tender documents free of cost, exemption from submission of Earnest money deposit, price preference, etc. as per Govt. Guidelines.
- SC/ST owned enterprises shall submit relevant SC/ST certificates and registration should remain valid at the time of bidding.
- c. Condition of prior turnover & prior experience with respect to start-up and micro & small enterprises will be relaxed as per Govt. Policy circular No. 1(2) (1)/2016-MA Dtd. 10/03/2016 & F.20/2/2014-PPD (Pt) Dtd. 20/09/16 subject to meeting of Quality & technical specifications
- 4. Goods bearing ISI mark will be given preference
- 5. Materials shall be packed properly to avoid any damage during transit.
- BVFCL is committed to a corruption free work environment. "All the above purchases, services and commitments of BVFCL will be honoured without the citizen having to pay any bribe." In case any person demands any bribe, it is the duty of the responsible to inform the matter to vigilance office, BVFCL, Namrup, P. O. Parbatpur, Dist. Dibrugarh, Assam PIN; 786623. (Tel no: 0374-2507092 / 0374-2507167).

Enclosures 1. Annexure-A 2. Annexure-I&II Yours faithfully, For and on behalf of Brahmaputra Valley Fertilizer Corporation Ltd

> V K. TAMBOLI ASSTT. MATERIALS MANAGER

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#### Vendor's Scope:

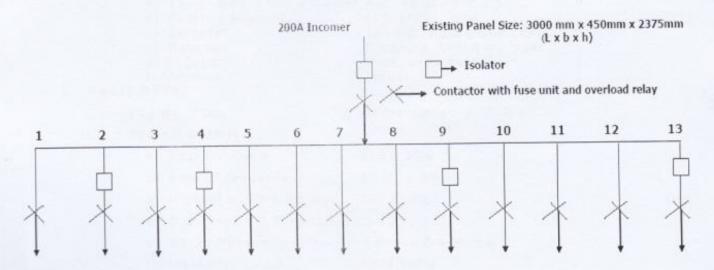
- A. Design, Manufacture, Assembly, Testing at works before dispatch, Inspection & Delivery at site in suitable packed condition of the MCC & accessories.
- B. Dismantling of the existing Panel & Retrofitting of the supplied panel (Replacement, testing & commissioning at site) under supervision of the service engineers of the manufacturer. In this process the jobs involved are-
  - Removal of existing Panel from their location after disconnecting cables & control supply wiring from cradle.
  - 2. Assembling and fitting of all the accessories as per the existing system.
  - 3. Testing & commissioning of new ACB at site by service Engineer of the manufacturer.
  - 4. For this whole job, the maximum shut down time required will be provided.
  - Submission of drawings, test certificates, catalogues, operation and maintenance instructions, recommended spare part list, Guarantee against poor workmanship and supply and other relevant documents along with the supply.

## BVFCL's Scope:

- 1. Providing required Electrical Power Supply for drilling, welding, cutting free of cost.
- 2. Basic amenities to field staff at site.
- 3. Guest House facility for staying on chargeable basis.
- 4. Free of cost Work shop facility for minor modification etc.
- 5. Compressed air if required for site job free of cost.
- 6. Control & power Circuit drawing, GA drawing of the existing system will be provided as and when required.

#### #Note:

- Quotation must have point wise information to all the aspects as mentioned in Annexure-I and MCC details with feeders
  as per attached sheets of individual MCC
- For existing feeder arrangement/distribution/cabling and other details, the bidders may visit site and collect data prior to submission of offer.
- Guarantee: The bidders shall mention in the bid that the equipment shall be guaranteed in respect of Material, workmanship & performance.



- 1 Discharge Conveyor Motor 5HP/3.7 KW, 9.2 A
- 2. 415/240 V 2000 VA Lighting Transformer,
- 3. Elevator motor, 20HP/15 KW, 28A,
- 4. 415/240 V 1000 VA Control Transformer,
- 5. Scrapper moor, 12.5 HP/25HP, 17.5A/34.5 A (dual speed motor with forward & reverse direction in both the speeds)
- 6. Slewing motor 5HP/3.7 KW, 9.2 A (with both forward & reverse direction)
- 7. Luff Motor 7.5 HP/ 5.5 KW, 14 A (with both forward & reverse direction)
- 8. Creep motor 1HP/0.75 KW, 1.98 A
- 9. Ventilator motor. 0.5 HP/0.37KW,1.1A
- 10. Traveling Motor 5HP/3.7 KW, 9.2 A (with both forward & reverse direction)
- 11. CRD Motor 3HP/2.2 KW, 4.8A
- 12. Power Socket Point 440V, 3Phase.
- 13. 24V Transformer for emergency safety lamp.

## 1. GENERAL SPECIFICATION:

i. Ref standard: IS

ii. Ambient condition:-

a) Temp. Max. / Min. / Design Ref. 44°C / 5°C / 50°C

b) Relative Humidity : 100% condensing.

c) Altitude : 123 mtr. Above Sea Level.
d) Rain fall : 9 months during the year.

e) Pollution : Dust, Urea dust.

f) Location Indoor.

#### 2. BASIC DATA:

. Tag No. / Qty : As mentioned in MCC's

## ii. System Details:-

a) Rated Voltage 415 ± 10%. b) Rated Frequency 50 Hz ± 5%.

c) Highest System Voltage :500 Volts.

d) Combined V & F variation :± 10%.

e) No. of Phases. & Wires 3 Phase & 4 Wires

f) Insulation Level :1000 Volts.
g) Panel Type :Indoor type.

h) Earthing mode. :Solidly earthed.

i) Bus Bars :Insulated with PVC sleeve 3.
j) Existing Panel Dimensions : 3000 mm x 450 mm x 2375 mm.

#### Execution

a) Feeders : Single Front b) Type : Draw out c) Cable entry : Bottom.

d) Accessibility: Front

3. Painting Powder Coated Epoxy Shade 631 of IS

4. Termination : Detachable Gland Plate suitable for

Cable termination.

#### 5. STANDARDS TO BE FOLLOWED

The design, manufacture and testing of the equipment shall comply with the latest issue of the following Indian Standards, unless otherwise Specified.

IS 8623 Specification for low voltage switchgear and control gear assemblies.

1S 13947 Specification for Low-voltage Switchgear and Controlgear

IS 5578 Guide for marking of insulated conductors.

IS 11353 Guide for uniform system of marking and identification of conductors and apparatus.

IS 10118 Code of practice for selection, installation and maintenance of switchgear and control gear.

IS 12063-1987 Classification of degrees of protection provided by enclosures of electrical equipment.

Various components housed in the switchboards shall conform to the Indian Standard specification as mentioned against the component details.

- a) The design and operational features of all the equipment offered shall also comply with the provisions of the latest issue of the Indian Electricity Rules and other Statutory Acts and Regulations. The supplier shall, wherever necessary, make suitable modifications in the equipment to comply with the above.
- b) Wherever any requirement, laid down in this standard, differs from that in Indian Standard Specification, the requirement specified herein shall prevail.

The Panel should be fabricated with 3MM CRCA sheet steel, structure treated under 7-tank metal treatment process and duly powder coated with smoke gray provided with 250A Aluminium bus bar and all necessary accessories-gasket, bus-bar support, door locks, hinges, name plate etc. and the following electrical components:

SI. No	Particulars	Rating	Qty.	Make
.40	Incomer	200A		To be specified
1.	36KA 4Pole MCCB with Thermal Magnetic Release Meter & Others	200A	1	and should be of Standard & reputed make.
1	RYB Indicator Lamp Set		1	
2	Digital Ammeter with selector switch		1	
3	Digital Voltmeter with selector switch	-	1	
4	SP MCB with 10KA Breaking Capacity	2 A	3	
5	Current Transformer		3	
6	Neutral Link	200/5 A		
0			1	
	Outgoing Direct Online Starter	5 H.P (3.7 KW)	1	
1	Contactor	12 A	1	
2	Illuminated type Start/stop Push button		2	
3	O/L Relay	6-10A	1	
4	SP MCB with 10KA Breaking Capacity	2A	1	
5	Neutral Link		1	
6	TP MCB with 10KA Breaking Capacity	16 A	1	-
	Star Delta Starter	20 HP	1	
1	Main/Delta Contactor	45 A	2	
2	Star Contactor	32 A	1	
3	Overload Relay	14-23A	1	
4	Star/Delta Timer		1	
5	Trip Indicator		1	
6	Illuminated type Start/stop Push button		1	- V
7	SP MCB with 10KA Breaking Capacity	2A	1	
8	Neutral Link		1	
9	TP MCB with 10KA Breaking Capacity	40 A	1	-
	R-Direct Online Starter	12.5 HP	1	
1	Contactor	25 A	4	
2	Illuminated type Start/stop Push button	and	3	
3	O/L Relay	14-23A	2	
4	SP MCB with 10KA Breaking Capacity	2 A	1	
5	Neutral Link		1	
6	TP MCB with 10KA Breaking Capacity	32 A	2	
	R-Direct Online Starter	25 HP	1	
1	Contactor	45 A	4	
2	Illuminated type Start/stop Push button		3	

11	O/L Relay	24-40A	2
4	SP MCB with 10KA Breaking Capacity	2A	1
5	Neutral Link		1
6	TP MCB with 10KA Breaking Capacity	63 A	2
	R-Direct Online Starter	5 HP	2
1	Contactor	12 A	4
2	Illuminated type Start/stop Push button		3
3	O/L Relay	6-10A	2
4	SP MCB with 10KA Breaking Capacity	2A	1
5	Neutral Link		1
6	TP MCB with 10KA Breaking Capacity	16 A	2
	R-Direct Online Starter	7.5 HP	1
1	Contactor	22 A	4
2	Illuminated type Start/stop Push button		3
3	O/L Relay	9-15A	2
4	SP MCB with 10KA Breaking Capacity	2 A	1
5	Neutral Link		1
6	TP MCB with 10KA Breaking Capacity	32 A	2
	Direct Online Starter	1 HP (0.75 KW)	1
1	Contactor	9 A	1
2	Illuminated type Start/stop Push button		2
3	O/L Relay	2-3.3A	1
4	SP MCB with 10KA Breaking Capacity	2A	1
5	Neutral Link		1
6	TP MCB with 10KA Breaking Capacity	6 A	1
	Direct Online Starter	0.5 HP (0.37 KW)	1
1	Contactor	9 A	1
2	Illuminated type Start/stop Push button		2
3	O/L Relay	1.4-2.3A	1
4	SP MCB with 10KA Breaking Capacity	2A	1
5	Neutral Link		1
6	TP MCB with 10KA Breaking Capacity	6 A	1
	Direct Online Starter	3 HP	1
1	Contactor	9 A	2
2	Illuminated type Start/stop Push button		2
3	O/L Relay	4.5-7.5A	2
4	SP MCB with 10KA Breaking Capacity	2A	1
5	Neutral Link		1
6	TP MCB with 10KA Breaking Capacity	16 A	2
	Power Socket Point	440V,3 PH	1
	2000VA Lighting Transformer	415/240V	1
	200VA Emergency safety Lamp Point	24V	1
	1000VA Control Transformer	415/240V	1

## 6. CLEARANCE AND CREEPAGE:-

- a) The clearances and creepage distances shall not be lower than the values specified below:-
  - 1. Minimum clearance between 2(Two) live conductors 20mm
  - II. Minimum clearance between live parts

and accidentally dangerous part

- 20mm

Minimum creepage distance

- 28mm

b) The clearances and creep age, as specified above, shall definitely be maintained in the bus-bar system. Provision of bus-bar insulation, separators of barriers shall not be considered to reduce the clearance from the values specified above.

c) At the termination points in the equipment e.g. switches, contactors, thermal relays etc. it is realized that above clearances may not always be possible to be maintained. All such points, where above clearances and creep age distances are not possible to be maintained, should be insulated or taped.

## 7. INSULATION

a) The insulation used shall be non-hygroscopic and may be of porcelain, epoxy resins of fiberglass moulded with plastic. It shall be of adequate electrical, mechanical and thermal strength to give trouble free service during normal operation and short circuit conditions.

The insulation shall be treated suitably to withstand the tropical conditions and atmospheric pollution, as specified in Specification Sheet.

#### 8. SPACE HEATER:

Each panel shall be provided with space heater to prevent moisture condensation, and maintain cubicle temperature  $5^{\circ}$  C above the ambient. The space heaters shall be located at the bottom of the panel, and shall be controlled through a MCB and thermostats with an adjustable setting.

9. NAME PLATE: The MCCs shall have large name plate on the top indicating its Name, Capacity, Voltage level, Make, Year of manufacture, Reference No.

Each feeder shall be provided with name plate describing its capacity. The labels shall be of black Perspex acrylic unbreakable sheets with 20 mm size letters engraved in white. Each single front panel shall have name plate indicating panel number both in front and back.

All control switches, push buttons, lamps etc. shall have functional identification labels. Name plates shall be of black Perspex with white engraving and of minimum 3 mm thickness.

Danger plate of suitable size and descriptions as recommended in the relevant IS shall be provided in the MCC panel.

Any other accessories required, but not specified, shall also be supplied to make the MCC complete in all respects and ensure safe and proper operation.

#### 10.TESTING AND CERTIFYING:

SUPPLIER will conduct Type test and Routine Test on the switch boards during and after manufacturing in conformity with relevant Indian / International Standards and supply the test certificate to obtain dispatch clearance from M/s BVFCL, Namrup.

The equipment shall be subjected to stage inspection during process of manufacture and site inspection. These inspections shall however, not absolve the vendor from his responsibility for making good any defect which may be noticed subsequently.

### 11. DRAWINGS AND DOCUMENTS FOR MANUFACTURING:

SUPPLIER will send detailed along with the bids:

 i) GA drawing (with dimensions and weight) including foundation plan indicating certified dimensions, floor opening, clearances etc.

ii) Proposed Single line / schematic drawing.

iii)Technical Data Sheet [technical data sheet will be complete to the extent that these can be considered for bid evaluation through loading if required.]

On award of order obtain clearance for manufacturing of the MCCs

12.FINAL DRAWINGS AND DOCUMENTS:

Supplier shall send

- GA drawing
- ii) Schematic drawing
- iii) Name plate.
- iv) Rating plate.
- v) Test certificate as above.
- vi) Operating instructions
- vii) Fault finding guidelines.
- viii) Vendor's Literatures on bought out items / relays.

ix) CT details.

x) O/IRelay details

xi) Meter details with Manuals,

xii) Other relevant documents as agreed upon / required as per standard.

xiii) Final technical data sheet.

xiv) Erection, Commissioning, tests manual.

xv) Others as covered by relevant IS and obtain BVFCL's clearance for dispatch.

## 13.SUPPLY OF COMPONENTS:

All components shall be supplied in a suitable case to protect from damages in transit and to preserve in open air till erection.

14.SUPPLIER'S INSPECTION / REPAIRS AT SITE:

In case of any abnormality / damage observed at site the same will be communicated to the supplier and supplier will arrange to attend to the same in case these are related to and covered in the scope of supplier. (Manufacturing or workmanship defect etc.) free of cost. In case any repair is to be taken up by the supplier due to reasons attributable to BVFCL. Namrup the same will be attended by the party on chargeable basis.

15. SPARES AVAILABILITY:

Supplier will guarantee that any spares as required will be supplied by the supplier for first 10 (ten) years of operational life of the circuit breaker panel from the date of supply

16.GUARANTEE:

Supplier shall guarantee performance of the MCCs for 12 (twelve) months from commissioning or 18 (eighteen) months from supply whichever is earlier.

17. PRICES: Supplier shall quote as per price break-up.

18. DELIVERY SCHEDULE:

Supplier shall quote firm delivery schedule.

19. The bidders shall sign and put their seal on all the pages of the General Specification as a token of acceptance. Deviations, if any, against any point shall be clearly indicated in the offer with reasons thereof.

20. Arrangement of any other item not specifically mentioned hereinabove or not mentioned anywhere else, but required to complete the manufacture, testing and supply of the MCCs shall be included in

bidder's scope.

21. Drawing of the existing MCC is supplied for reference only and to estimate the cabling requirements (length) of the existing feeders while arranging/placing the cubicles so that existing cables can be easily connected to respective feeders in the offered MCC.

The spare motor feeders/switch fuse units can be placed suitably.

22. For existing feeder arrangement/distribution/cabling and other details, if desired, the bidders may visit site and collect data prior to submission of offer.