



BRAITHWAITE & CO LIMITED

(A Government of India Undertaking)

SUBSIDIARY OF BBUNL

Accredited with Quality Standards

9001 for Cranes / ISO 9002 for Railway Wagons

HEAD OFF. & REGD. OFF. : 5, HIDE ROAD, KOLKATA – 43, TEL 2439-7415, 2439-4114, 2439-6613,
2439-7413 E MAIL : FAX : 91 (033)2439 7632 / 2439 5607

Ref: Tender Enquiry No. BWT/CORP/PUR/SP-34/NPG- 2007

Dt. 27.02.2007

Dear Sirs,

Please quote your prices for Design, Supply, Erection, Testing & Commissioning of Automatic Power Factor Correction Meter Panel as per the specifications mentioned in Annexure-I for improvement of Power Factor (Sub station 1 & 2) at BCL-Angus Works, Bhadreswar, Distt: Hooghly. **The detailed Scope of Work is mentioned in Annexure-I (enclosed). The details of drawing and materials list and interconnection drawing to be forwarded.**

Your quotation shall comprise of two parts:

- a) **Part- I : Techno-commercial Bid**
- b) **Part – II : Price Bid**

Both the parts shall be submitted separately in two envelopes and these shall be put in a 3rd envelope and all the 3 envelopes shall be superscribed with our Tender Enquiry No. BWT/CORP/PUR/SP-34/NPG- 2007 Dated 27.02.2007 and due on 16.03.2007.

The quotation will be considered as cancelled if the documents required for Part-I & Part-II are not placed in the respective envelope.

Quotation must be sent in sealed cover either by registered post or may be dropped in our tender box no. 2 in case of hand delivery.

Sealed quotations addressed to Manager (Purchase), Braithwaite & Co. Ltd., 5 Hide Road, Kolkata 700043 may be dropped in our tender box no. 2 (in case of hand delivery) or may be sent by registered post, but must reach us positively within 16.03. 2007. The techno-commercial bid will be opened on 17.03.07 at 11.00 a.m. You may present during opening of the tender.

An unconditional acceptance of commercial terms and conditions stipulated in Annexure-II of this tender enquiry is to be given along with the offer.

For Braithwaite & Co. Ltd.,

Encl: Annexure-I & II

N. P. Ghosh
Assistant Manager (Purchase)

Note : Rs. 100/- by way of DD/Pay Order in favour of Braithwaite & Co. Ltd – Kolkata should be given along with your offer towards the cost of tender documents.

Design, supply, erection, testing & commissioning of Automatic Power Factor Correction meter panel as per following specification :

Scope of Work :

A) Design & supply of panel suitable for connection of 350 KVAR capacitor bank as per following specification.

a) 350 KVAR 10 Stage 400V+_6%, 3 Ph&N, 50 c/s, cubicle type Automatic Capacitor Control Panel of 14 SWG sheet steel construction, floor mounted, dust and vermin proof complete with 3 Phase bus bars, interconnections, wiring and comprising of :

- 1 no. 800A TP Fuse Switch with HRC fuses for Incoming.
- 1 no. 10 Stage Automatic Power Factor correction relay PCR complete with supply failure protection and 230V AC reversible motorized switching unit with dual time mechanism for each stage for quick response/safe discharge time / antihunting characteristics with lag and lead LED in built in Auto/Manual – Test switch & Self test push button.
- 1 no. 250A TP switch fuse unit with 250A HRC fuses for 100 KVAR fixed capacitor.
- 10 nos. 63A TP contactor with 230V AC coil for 25 KVAR Units.
- 30 nos. 63A HRC fuses with fuse base.
- 1 no. 12 Pole selector switch for Auto/Off/Manual selection.
- 1 no. P.F. Meter.
- 1 set Voltmeter with selector switch.
- 1 set Ammeter with selector switch.
- 10 nos. Indicating lamp.
- 10 sets Manual Control Switch.
- 3 nos. Control fuses.

Quantity – 1 no.

b) Supply of 350 KVAR L.T. Shunt Capacitor for Power System as per following specification:

- Type : Heavy Duty Double Dielectric impregnated with H. V. Grade, NON-TOXIC, NON PCB & NON INFLAMABLE OIL and OIL FILLED in metallic container.
- Construction : 1) Modular construction with Heavy Edge, LOW-LOSS, high dielectric constant. Metallised electrode with a Reinforced side and Self Healing properly.

- 2) Capacitors are to be provided with inductors. Modules are to be explosion proof. Discharge Resistors to be connected to reduce crest voltage as per I.S. Capacitors should be ISI Marked and quality assurance as per ISO 9001 – 2000.
- 3) Capacitor container in metallic, dust proof and Hermetically Sealed.

Technical Particulars :	1) Rated output	- 350 KVAR.
	2) Rated voltage	- 400 VAC. +_ 6%
	3) Frequency	- 50 HZ.
	4) Phases connection	- Three phase. Delta connected.
	5) Temperature Category	- 45°C / 50°C (as per IS).
	6) Permissible over load	- As per IS.
	7) Standards	- IS 2834/1986 & IS 13340/1993

Following point to be mentioned in the offer :

- 1) Dielectric loss.
 - 2) Total loss.
- Quantity : 1 Set

- c) Installation of 350 KVAR 400V, 3Ph capacitors panel & capacitor bank including related civil foundations and cable laying & termination current limiting reactors and discharge resistance with panel & existing bus bar system. (Only cable will be supplied by Braithwaite) Approx. cable length 60 M, Terminations – 8 nos. – **Rate to be quoted per unit basis.**

Note:-

- 1) Make of Contactors/Switches/Fuses – L&T/ SIEMENS/ GE
- 2) Make of relay – AVOMEK/BCH/L&T/SIEMENS
- 3) Make of Capacitors – SUNNY/ L&T/ UNIVARSAL

B) Design & supply of panel suitable for connection of 200 KVAR capacitor bank as per following specification.

- a) 200 KVAR 8 stage 400V+_ 6%, 3 Ph&N 50 c/s cubicle type Automatic Capacitor Control Panel of 14 SWG sheet steel construction, floor mounted, dust and vermin proof complete with 3 phase bus bars, interconnections, wiring and comprising of :

- 1 no. 630A TP Fuse Switch with HRC fuses for Incoming.
- 1 no. 8 stage Automatic Power Factor correction relay PCR compete with supply failure protection and 230V AC reversible motorized switching unit with dual time mechanism for each stage for quick response/safe discharge time/antihunting characteristics with lag and lead LED in built in Auto/Manual – Test switch. Self test push button.
- 1 no. 125A TP switch fuse unit with 250A HRC fuses for 50 KVAR fixed capacitor.
- 6 nos. 63A TP contactor with 230V AC coil for 25 KVAR Units.

- 18 nos. 63A HRC fuses with fuse base.
- 1 no. 8 Pole sector switch for Auto/Off/Manual selection.
- 1 no. P.F. Meter.
- 1 set Voltmeter with selector switch.
- 1 set Ammeter with selector switch.
- 6 nos. Indicating lamp.
- 6 sets Manual Control Switch.
- 3 nos. Control fuses.
- Quantity – 1 no.

b) Supply of 200 KVAR L.T. Shunt Capacitor for Power System as per following specification:

- Type : Heavy Duty Double Dielectric impregnated with H. V. Grade, NON-TOXIC, NON PCB & NON INFLAMABLE OIL and OIL FILLED in metallic container.
- Construction :
 - 1) Modular construction with Heavy Edge, LOW-LOSS, high dielectric constant. Metallised electrode with a Reinforced side and Self Healing properly.
 - 2) Capacitors are to be provided with inductors. Modules are to be explosion proof. Discharge Resistors to be connected to reduce crest voltage as per I.S. Capacitors should be ISI Marked and quality assurance as per ISO 9001 – 2000.
 - 3) Capacitor container in metallic, dust proof and Hermetically Sealed.
- Technical Particulars :
 - 1) Rated output - 200 KVAR.
 - 2) Rated voltage - 400+_6% VAC.
 - 3) Frequency - 50 HZ.
 - 4) Phases connection - Three phase. Delta connected.
 - 5) Temperature Category - 45°C / 50°C (as per IS).
 - 6) Permissible over load - As per IS.
 - 7) Standards - IS 2834/1986 & IS 13340/1993.

Following point to be mentioned in the offer :

- 1) Dielectric loss.
- 2) Total loss.

- c) Installation of panel & capacitor bank including related civil foundations and cable laying & termination of 200 KVAR 440V 3Ph capacitors with current limiting reactors and discharge resistance with panel & existing bus bar system. (Only cable will be supplied by Braithwaite)

Approx. cable length 60 M, Terminations – 8 nos. – Rate to be quoted per unit basis.

Note:-

- 1) Make of Contactors/Switches/Fuses – L&T/ SIEMENS/ GE
- 2) Make of relay – AVOMEK/BCH/L&T/SIEMENS
- 3) Make of Capacitors – SUNNY/ L&T/ UNIVARSAL

For Braithwaite & Co. Ltd.,

PART-I : TECHNO-COMMERCIAL BID**GENERAL TERMS & CONDITIONS:**

TENDER ENQUIRY NO. BWT/CORP/PUR/SP-34/NPG- 2007 Dt. 27.02.2007

- 1) EMD : 5,000/- (Rupees Five Thousand only): EMD is required to be deposited as Bid Security and to be submitted in the form of DD/Pay Order in favour of Braithwaite & Co. Ltd payable at Kolkata. However, for SSI Units single point registration with NSIC, payment of EMD/Security Deposit can be considered for exemption to the extent of monetary limit granted on submission of valid NSIC registration certificate. Copy of the valid NSIC registration certificate should be furnished.
- 2) Credentials: Tenderer must submit the following documents as part of techno-commercial bid:
 - a) Copy of Sales Tax Clearance Certificate
 - b) Copies of Purchase Orders for similar type of job done .
- 3) Security Deposit : @ 10% of the order value only in the form of DD/Pay/ Order/Bank Guarantee from an Indian Nationalised Bank to be submitted by the successful bidder within 10 days from the date of receipt of purchase order.
- 4) Performance Guarantee : After completion of the job. 10% of order value in the form of Bank Guarantee from an Indian Nationalised Bank to be submitted duly valid till completion of guarantee/warranty period. However, Security Deposit may be converted to Performance Bank Guarantee.
- 5) Payment : **For supply** : 70% against Proforma Invoice. Cheque would be handed over after receipts of materials at stores in good conditions. Balance 30% would be released after successful erection, testing & commissioning and handing over the equipments to BCL.
For erection, testing & commissioning : 100% after successful erection, testing & commissioning and handing over the equipments to BCL.
- 6) Validity : Offer should remain valid for a period of 90 days from the date of opening of this tender.
- 7) Quoted rate should remain firm till completion of the job and price variation shall not be entertained.
- 8) Price should be quoted both in figures and words and your quotation must be free from any kind of overwriting, alteration and correction.
- 2) BWT shall reserve the right to increase or decrease the ordered quantity at the same rate and terms.

- 3) BWT shall reserve the right to split up the tendered quantity.
- 4) BWT shall reserve the right to accept or reject the tender partly or fully without assigning any reason.
- 5) Liquidated Damages : In the event of failure to complete the job within the stipulated completion period, BWT reserves the right to recover a sum of 0.5% for every week or part thereof by way of LD subject to maximum limit of 10% of the ordered value.
- 6) Risk Purchase : In the event of failure on the part of the contractor to complete the job, BWT reserves the right to get the job done by other agency/agencies as per the purchase order and shall recover the extra cost thereof, if incurred, from contractor.
- 7) Arbitration : Any dispute or difference whatsoever, arising between the parties and the purchaser out of relating to the construction, meaning, scope, operation or effect of the contract or validity or the breach thereof shall be settled by arbitration in accordance with the Rules of Arbitration in pursuance thereof shall be binding on the contractor.
- 8) Guarantee : The job shall be guaranteed for a period of 12 months from the date of commissioning. TC & GC to be provided.
- 9) Delivery/Completion of job : The job shall be completed within 3 months from the date of receipt of purchase order.
- 10) Loading & Unloading of materials : Loading and unloading of materials from the transport during delivery of the materials will be the responsibility of the vendor.
- 11) Any legal dispute that may arises should be settle within the jurisdiction of Court of Kolkata.
- 12) Inspection: The entire job will be subject to inspection by BCL.
- 13) The job cannot be subcontracted by the contractor wholly/partly without the permission of the purchaser.
- 14) The contractor and his employees should follow all the instructions given to the contractor or his authorised representative by the purchaser while doing the job within the premises of the purchaser.
- 15) The contractor's workmen should be covered by proper insurance against any injury / accident and/or death. Braithwaite will not be responsible on this account under any circumstances. The contractor shall observe all safety rules and regulations as per requirement of the particular nature of work. The contractor will also fulfill statutory obligations.
- 23) The tender is not transferable

PART – II: PRICE BID

- 1) The rate will remain firm till completion of supply.
- 16) The rate to be quoted both in figures and words.
- 17) Overwriting in price figure of the quotation will be rejected.
- 18) The bidder shall submit rate in the following format.

Breif description of items	Quantity	Rate(Rs.)	Total Amount
(A) Design & Supply of Automatic Power Factor Correction Meter Panel –			
(1) 350 KVAR LT Shunt Capacitors alongwith Panel	1 Set		
(2) 200 KVAR LT Shunt Capacitors alongwith Panel	1 Set		
B) Erection, Testing & Commissioning of Automatic Power Factor Correction Meter Panel			
+ Taxes & Duties, if any			
Total :			

For Braithwaite & Co. Ltd.,