ASSAM ELECTRICTY GRID CORPORATION LIMITED

Bijulee Bhawan, Guwahati

TENDER SPECIFICATION NO. AEGCL/MD/SS-154

Tender for design, manufacture, test, supply and delivery of Battery Bank, Battery Charger, DCDB and LTAC panels for different Grid substation of AEGCL.

Price: Rs. 500.00

-: **NOTICE INVITING TENDER: -**

Tender reference No :- AEGCL/MD/SS-154

The Managing Director, Assam Electricity Grid Corporation Limited, Bijulee Bhawan, Paltanbazar, Guwahati-781001, vide tender specification no: AEGCL/MD/SS-154 invites sealed two part tenders (Part I- Technical Bid, Part II- Price Bid) in triplicate from reputed manufactures or their authorised agent with 180 (One hundred eighty) days validity from the date of opening of 'Technical/Price Bid" for design, manufacture, testing, packing and delivery of stationary type Lead Acid Battery Bank (Plante) , Float and Boost Battery Charger, DC Distribution Boards and LTAC Panels complete with all required accessories for various Sub-stations of AEGCL. A complete set of bidding documents may be purchased by the interested bidders on submission of a written application to the Managing Director, Assam Electricity Board, Bijulee Bhawan, Paltanbazar, Guwahati -1 during office hours on all working days **from 22.07.10 up to 05.08.10** upon payment of non-refundable fee of Rs 500/- by crossed demand draft in favour of the " Managing Director, Assam Electricity Grid Corporation Limited, Bijulee Bhawan, Paltanbazar, Guwahati -1". The draft shall be payable at Guwahati. The tender shall be received up to **13-30 hrs on 05.08.10** and shall be opened at **14- 00** hrs on the same date. Tender must be accompanied with earnest money of Rs. 50,000.00 and the same should be submitted in the form of bank draft / bank guarantee, pledged in favour of MD, AEGCL. The detailed terms and conditions are available at web site www.aegcl.co.in. The undersigned reserves the right to reject any or all tenders without assigning any reason thereof.

Managing Director
AEGCL

Memo no. AEGCL/MD/SS-154/1 Dtd. 16th July 2010

1. The PRO, ASEB — He is requested to publish the NIT in the one issue of local English & National dailies
2. The Sr. Manager V cum IT, AEGCL — :- for necessary action
3. NOTICE BOARD

Managing Director
AEGCL

SECTION : 1

TECHNICAL SPECIFICATION OF BATTERY BANK AND CHARGER, DCDB & LTAC

1.1.0. SCOPE

1.1.1. **This Section of the Specification covers the design, manufacture, and testing at manufacturer's work, of stationary type sealed, Lead Acid Battery Bank (Plante type) , Battery Charger, DC Distribution Boards and LTAC Panels complete with all required accessories for various Sub-stations.**

1.2.0. BATTERY BANK

1.2.1. TYPE AND RATING

I) Stationary type, sealed, **Lead Acid Battery Bank (Plante Type) suitable for o**peration on 110 Volts D.C. or 220 Volts D.C system to meet loads like emergency lightning, control and signaling circuits, relays, breaker operations, indicating circuits, etc. shall be required. The stationary battery shall comply with the provisions of IEC 896, Part 2 / ANSI T1.330.

II) The Ampere-hour capacity of the battery bank at 27°C at 10 hours discharge rate shall be **150 AH** for 110 Volts D.C. system and **300 Ah** for 220 Volts D.C. system

III) The nominal voltage of the battery bank shall be 110 Volts D.C. or 220V DC

iv) The number of cells in a complete battery bank set shall be 55 plus 2 spares for 110 Volts D.C and 110 plus 2 for 220 Volts D.C. system

1.2.2. PLATES

Positive plates shall be made of flat pasted type using lead-cadmium antimony alloy for durability, high corrosion resistant, maintenance free, long life both in cyclic as well as in ,float applications.
Negative plates shall be heavy duty, durable flat plate using lead calcium alloy pasted box grid. Negative plates shall be designed to match the life of positive plates and combination of negative and positive plates shall ensure long life, durability and trouble free operation of battery.
PLC operated equipment should be deployed for preparation of paste to ensure consistency in paste quality. Conventional / manual type of paste preparation is not allowed.

1.2.3. CONTAINER AND LID

The containers and lids shall be made of a special grade polypropylene copolymer plastic material. They shall be sufficiently robust and not liable lo deformation under internal operating pressures and with in the temperature range naturally encountered, leak proof, non-absorbent and resistant to the acid with low water vapour permeability.

1.2.4. VENT PLUGS :

Each cell shall be equipped with one-way safety valve with opening pressure of 5±1 psi and closing pressure 4±1 psi. The vent plug shall be made with suitable grade of fire retardant plastic material. Each valve opening shall be covered with flame barrier capable in preventing the ingress of flame into the cell interior when the valve opens and hydrogen / oxygen gas mixture is released.

1.2.5. SEPARATORS :

Separator shall be made of spun glass, micro porous matrix and shall be resistant to Sulphuric Acid. It shall be capable of keeping the entire electrolyte and shall be electrically insulated. Sufficient separator overlap and PVC shield protection to top and bottom edges of the plates is to be provided to prevent short circuit formation between the edges of adjacent plates.

1.2.6. CONNECTORS :

The connectors shall be lead coated copper of suitable size to join the cells. The connectors shall be suitably designed and coated to withstand corrosion due to sulphuric acid. The coating should be adequate and tenacious. All the copper inter cell connectors shall be provided with heat shrinkable sleeves except at the connecting points.

1.2.7. ELECTROLYTE:

The electrolyte shall be prepared from the battery grade Sulphuric Acid confirming to ISS: 266. Acid will be supplied in separate container for filling at the time commissioning at site.

1.2.8. WATER

Water required for preparation of electrolyte shall conform to IS: I069.

1.2.9. PLATE CONNECTION

Lugs of plates of like polarity shall be connected by lead burning to a horizontal strap having an upstanding terminal post adopted for connection to external circuit. Strap and post shall be caste with lead alloy. The positive and negative terminal posts shall be clearly marked for unmistakable identification.

1.2.10. BOLTS AND NUTS

Nuts and Bolts for connecting the cells shall be of superior grade passivated Stainless steel.

1.2.11. TERMINALS

Terminals shall be of integral lead terminal with solid copper core with M6 threading for fastening. The junction between terminal posts and cover and between the cover and container shall be hermetically sealed.

1.2.12. BATTERY RACKS

Batteries shall be installed on MS racks to be supplied by the Contractor to fit in the battery room. Racks/Trays shall be powder coated with anti corrosive paint. Rack shall accommodate 55 cells plus 2 spares. Racks/Tray shall be suitably treated before painting for protection against fungus growth and other harmful effects due to tropical environment.

The colour of the supporting racks shall conform to RAL 7032 shade.

1.3.0. BATTERY CHARGER

1.3.1. GENERAL DESCRIPTION

The battery charging equipment shall be capable of giving two rate of charging currents namely Boost Charge and Trickle Charge. The charging equipments capable of giving two rate of charging currents shall consist of two separate sections: Boost Charger Section & Trickle Charger Section.

For 110Volt D.C. System

The Trickle Charger Section along with all necessary equipments is required for the purpose of float charging one battery bank of 55 cells of capacity 150 Ah at 10 hours discharge rate at the rate of 2.0 volts to 2.3 volts per cell and for meeting a constant D.C. load of 10 Amperes at 110 Volts D.C. simultaneously.

The Boost Charger Section along with all necessary equipments is required to charge a battery bank of 55 cells of capacity 150 Ah at 10 hours discharge rate at the rate of 1.85 volts to 2.55 volts per cell and for meeting a constant D.C. load of 10 Amperes simultaneously.

For 220V D.C System

The Trickle Charger Section along with all necessary equipments is required for the purpose of float charging one battery bank of 110 cells of capacity 300 Ah at 10 hours discharge rate at the rate of 2.0 volts to 2.3 volts per cell and for meeting a constant D.C. load of 10 Amperes at 220 Volts D.C. simultaneously.

The Boost Charger Section along with all necessary equipments is required to charge a battery bank of 110 cells of capacity 300 Ah at 10 hours discharge rate at the rate of 1.85 volts to 2.55 volts per cell and for meeting a constant D.C. load of 10 Amp.

1.3.2. **TYPE AND RATING**

i) TYPE

The charger shall be static type, using Silicon Rectifiers. The rectifiers shall be arranged in three phase bridge circuit for full wave rectification. The charger unit shall be suitable for operation on 415 volts three phase, 4 wire, 50 Hz A.C. Supply.

The Boost and Trickle Charger section shall have an arrangement for automatic and manual D.C. voltage regulating system with an Auto / Manual change over switch.

ii). RATING

The entire charger circuitry shall have two separate sections eg. Boast charger and Trickle charger sections and shall of following ratings:

1. Float Charger

(a) D.C. Output Voltage: (i) The D.C. output voltage of the Float charger shall be 110 volts (nominal). Or 220V DC (nominal) (ii) The D.C. output voltage of the Float charger shall be adjustable between 110 volts to 126.5 volts for 110V DC system or 220 volts to 250 volts for 220V DC system

(b) D.C. Output Current: (i) The Trickle charger shall be capable of supplying a continuous D.C. load of 10 amperes and float a battery bank of 150 Ah at 10 hours discharge rate simultaneously at a normal voltage of 110 volts D.C. for 110V DC system

Or

D.C. Output Current: (i) The Trickle charger shall be capable of supplying a continuous D.C. load of 10 amperes and float a battery bank of 300 Ah at 10 hours discharge rate simultaneously at a normal voltage of 220 volts D.C. for 220V DC system

2. Boost charger:

(a) The D.C. output voltage of the Boost charger section shall be adjustable between 101 volts to 140 volts for 110V DC system Or 200 Volts to 280 Volts for 220V DC system

(b) D.C. Output Current: The Quick charger shall be capable of charging a battery bank of 150 Ah capacity at 10 hours discharge rate and to meet a continuous D.C. load of 5 amperes simultaneously. Output current of the Boost charger shall not be less than about 20 Amperes.

Or

D.C. Output Current: The Quick charger shall be capable of charging a battery bank of 300 Ah capacity at 10 hours discharge rate and to meet a continuous D.C. load of 5 amperes simultaneously. Output current of the Boost charger shall not be less than about 20 Amperes.

1.3.3. OPERATION AND CONTROL REQUIREMENTS:

The incoming A.C. supply for Quick and Trickle charger shall be controlled by rotary switches. In addition to the rotary switches supplies to the both chargers shall be controlled by two push button operated contractors having overload protection. 'RED' & 'GREEN' indicating lamps shall be provided to indicate 'ON' & 'OFF' conditions respectively of the Quick and Float charges in addition to the A.C. 'ON' indication.

During normal operation of the Trickle charger shall supply the normal direct current requirements of the substation and the station battery shall be floating on D.C. system. In the event of failure of A.C. supply or failure of the charger itself the battery shall come automatically across the load without any interruption.

It is intended to supply the D.C. load of the equipment normally by the float charger during boost charging of the bank. Thus, when the Boost charger is switched 'ON' the Boost charger and the battery bank shall be isolated from the float charger and the load automatically. If during boost charging operation, the A.C. supply fails, the battery shall come automatically across the load without any interruption. During the infinitely small time required for initiation of the contractor a reduced number of cells shall be available across the load, through the blocking diode.

Provision shall also be made so that in the event of failure of Float Charger, the Boost charger shall supply the load as well as charging a battery bank. Arrangement shall be made to limit the voltages across the load to around 110 volts or 220 volts, even if the boost charger is operating at maximum charging voltage. This aspect shall be clearly brought out in the tender by the bidder. In this operation also, the battery bank should come across the load automatically and without any interruption in the event of A.C. mains failure.

1.3.4. VOLTAGE REGULATING SYSTEM

The Float and Boost Charger sections shall have suitable arrangement for regulation of D.C. output voltage by the following methods.

(a) Automatic Voltage Regulation.
(b) Manual Voltage Regulation.

(a) Automatic Voltage Regulation**:**

The Automatic Voltage Regulation shall hold the voltage flat from zero to full load within ±1% of pre-set value of the charger with a fluctuation of ±10% in voltage and ±5% in frequency in the A.C. input voltage. The setting device of the automatic voltage regulator shall be so designed that the D.C. output voltage can be set anywhere between (i) 100 volts to 126.5 volts for Float Charger for 110Volt DC system and 200 volts to 250 volts for float charger for 220Volts DC system and (ii) 100 volts to 140 volts for Boost Charger for 110Volts DC system and 200 volts to 280 volts for Boost Charger for 220volts DC system . The automatic voltage regulator shall be static type and its characteristics shall be supplied with the tender.

(b) Manual Voltage Regulator:

The Manual Voltage Regulator for Trickle charger shall have suitable equipments and means to control the D.C. output voltage with the ranges mentioned earlier. The voltage control shall be smooth and continuous. The charger shall have a change over switch for selecting 'Auto' or 'Manual' mode of regulation to regulate the D.C. voltage. The tenderer shall furnish all the details of the manual voltage regulator in the tender.

iii) Both the trickle and boost chargers shall be provided with alarm and indication for the following:

(a) Mains on
(b) Charger failed.
(c) Rectifier element fuse blown.
(d) Charger output fuse blown.
(e) AC input failed

iv) In addition to the above arrangement for controlling, regulating and operation of the charger, the bidder may suggest and quote suitable alternative arrangement for the same. The right of acceptance of such an arrangement shall however, lie with the Employer.

1.3.5. INSTRUMENTS, EQUIPMENTS, ETC

i) Rectifier Transformer

The rectifier transformers shall be designed to operate at a frequency of 50 Hz and at the r.m.s. voltage between the lines on the line side of transformers of 415+10% volts. The rating of the rectifier transformer shall correspond to the rating of the associated rectifier assembly. The transformer should preferably be air cooled dry / synthetic oil filled type and shall conform to the latest issues of IS: 2026 and IS: 4540.

ii) Rectifier Elements

Rectifier elements shall be Silicon and shall be arranged in three bridge circuit. The rectifier elements shall be protected by HRC fuse with fuse blow out indication. The rectifier stacks shall be supplied with their own heat dissipating arrangement for natural air cooling.

iii) Measuring Instruments:

The instruments shall be flush type and shall have dust proof and moisture resistant enclosed cases, finished in black and suitable for tropical use. Elements shall be shock resistant and shielded from external magnetic fields. The instruments and meters shall have easy accessible means for calibration testing and adjustment and shall conform to relevant I.S.S.

iv) Air Break Switches and Fuses:

The series combination air break rotary switches and HRC fuses shall conform to provisions of the latest issue of IS-4064, IS-4047 and IS-2208. the air break switches and fuses housed in the charger panel shall be so arranged that when they are opened, the terminals are readily accessible. Switches shall be of rotary operated type preferably with silver to silver contacts of adequate making, carrying and breaking current ratings and shall open and close with snap action to minimise arcing. The 'ON' and 'OFF' positions of the switches shall be definite and shall be clearly indicated.

All fuses shall be of HRC type conforming to the latest issue of I.S. 2208.

v) The charger units shall be provided with but not limited to the following instruments and equipments. For this tenderer may referred to the enclosed drawing also.

(a) 3 Pole A.C. mains ON-OFF switches and HRC fuses of suitable capacity.
(b) 2 pole air break switches with HRC fuses of suitable capacity output side of chargers.
(c) Air break magnetic contactors of suitable ratings complete with push button and thermal overload devices and red and green indicating lamps for A.C. input ON/OFF to the chargers.
(d) Fuse blown out indication for D.C. output fuses.
(e) HRC fuses for protection of rectifier elements with fuse blow out indication.
(f) 0-500 volts range, A.C. voltmeters to measure A.C. input voltage to the chargers. Accuracy class 1.0 as per I.S. 1248.
(g) Moving coil, flush mounting type voltmeters of suitable ranges to measure trickle, boost and battery voltages. Accuracy class: 1.0 as per I.S.-1248.
(h) Moving coil, flush mounting type ammeters of suitable scales to read the output currents of boost and trickle chargers and load current. Accuracy class : 1.0 as per I.S.-1248.
(i) Single pole D.C. contactors of suitable ratings.
(j) Blocking diode of adequate capacity.
(k) Cubicle illuminating lamps with door operated switches suitable for 240 volts A.C.
(l) All other equipments and accessories for indication and alarm annunciation as mentioned earlier.
(m) All other equipments not specifically mentioned but required for proper and satisfactory operation of the charger shall be provided.
(n) The charger assembly shall be complete with input / output terminals, cable glands, internal wiring, earthing terminals, rating plates, etc.

1.3.6. CONSTRUCTIONAL FEATURES:

The whole battery charging equipments shall be housed in an indoor, floor mounting type; sheet metal clad, cubicle type enclosures which shall also be served as charger panels. The assembly shall be complete in all respect and shall contain all the components described in different clauses and which are essential for the proper operation and control of the equipments. The enclosures shall be totally enclosed dust tight and vermin proof.

All doors and covers shall be filled with rubber gaskets. The panels shall have double leaf hinged doors at the back and shall be provided with locks and duplicated keys. The equipments in the panels shall be so located as not to cause congestion and accessibility to the equipments located herein shall be easy and convenient.

All incoming and outgoing cables shall enter from bottom and suitable cable terminal boards with cable lugs shall be provided in side of each panel for incoming and outgoing cables. Each terminal of the terminal boards shall be serially numbered to facilitate connections. At least 20% extra terminals shall be provided in each terminal board. Suitable compression type cable glands with base plates shall also be provided. The terminal boards shall be easily accessible for inspection and checking. The panels shall have cable supports and metallic clips for supporting power and control cables for internal wiring of the panels.

1.3.7. TESTS

The battery charger and all the components of the charger shall be routine tested accordingly to their relevant standard. This shall include the following:

(a) Operational check for boost and float charger.
(b) Input / Output test of the chargers.
(c) Performance test of the charger.
(d) Temperature rise test of the rectifier transformer.
(e) Power frequency H.V. test / Insulation tests.

1.4.0. DC DISTRIBUTION BOARD

1.4.1. General Features

The D.C. distribution boards shall be indoor, floor mounting of self supporting, sheet metal clad, cubicle type. The panels should be totally enclosed, dust tight and vermin proof and shall be made of 2.0mm cold rolled sheet steel. The boards shall be provided with double leaf hinged doors at the back. All doors and covers shall be fitted with rubber gaskets. The doors shall be provided with locks and duplicated covers

1.4.2. Busbars

The busbars shall be of electrolytic copper of ample cross-section. The busbars shall be insulated from the structure by means of durable, non-hydroscopic, non-combustible and non tracking materials.

1.4.3. Detail Requirements

The 110/220 Volts D.C. distribution boards shall be provided with the following:

i. One mains failure alarm relay.
ii. One earth fault alarm relay.
iii. One 110/220 Volts D.C. bell to be operated by the mains failure alarm relay.
iv. One 110/220 Volts D.C. buzzer to be operated by the earth failure alarm relay.
v. One double pole air-break circuit breaker of 400 amp capacity with thermal overload tripping arrangement to act as incoming breaker of the load bus.
vi. One 0-150/0-300 volts D.C. Digital voltmeter to measure the bus-bar voltage.
vii. One pilot lamp to indicate D.C. on conditions.

viii. 250 volts, double pole double throw make before break switch with H.R.C. fuses of following ratings for outgoing feeders.

a. 16 Amp, 4 Nos.
b. 32 Amp, 4 Nos.
c. 63 Amo, 2 Nos

ix. One terminal Board/block for all feeder outlets including cable glands.

1.5.0. LTAC PANEL

1.5.1. General Arrangement

The 415 volts L.T.A.C. panels shall be indoor floor mountings sheet metal clad type comprising of combination switch fuse units and busbar chambers and equipped with circuits and equipments as specified. The different circuits shall be mounted above and below the busbar chamber to form a suitable arrangement, except that the incomings will be located at the front and mounted below the bus bar chamber. All equipments shall be suitable for the reception of the cables rising from the ground level. The switchboards shall be so designed as to be readily extensible.

1.5.2. Busbars

The phase and neutral busbars shall be of high conductivity Aluminium of adequate uniform cross section. The busbars shall be insulated from the structure by means of durable non-hygroscopic, non-combustible and non-tracking materials. Busbar joints shall be of bolted type.

1.5.3. Detail Requirements

The 415 Volts, L.T.A.C. Switchgears shall have following circuits and equipments:

a) INCOMING: One number fitted with following:
   i. One 300 Amp, triple and neutral switch fuse unit fitted with H.R.C. fuses and cable glands suitable for 4 core P.V.C. cable labeled as 'INCOMING'.
   ii. One Voltmeter, 0-500 Volts.
   iii. One Ammeter, 0-500 Amps.
   iv. One K.W.H. meter with connected C.T..

b) OUTGOING Nos. 1 and 2, each comprising of :
   One 60 Amps T.P.N. Switch fuse unit fitted with 60 Amps H.R.C. fuses and complete with direct connected round projecting pattern ammeter, scaled 0-75 Amps and cable glands suitable for 4 core P.V.C. cable and labeled as 'Transformer Heater' and 'Circuit Breaker Heater'.

c) OUTGOING Nos. 3 and 4, each comprising of :
   One 100 Amps, T.P.N. switch fuse unit, fitted with 100 Amp H.R.C. fuses and cable glands suitable for 4 core, P.V.C. cables and labeled as 'FILTRATION SET' and 'SPARE'.

d) OUTGOING Nos. 5, 6, 7 and 8, each comprising of :
   One 30 Amps D.P. switch fuse unit fitted with 15 Amp H.R.C. and cable glands suitable for 2 core P.V.C. cable labeled as :
      No. 5: 'Carrier Telephone'
      No. 6: 'Indoor lights and Indicating Lamps'
      No. 7: 'Emergency Lights'
      No. 8: 'Spare'.

e) OUTGOING Nos. 9, 10, 11 and 12, each comprising of :
   One 60 Amps T.P.N. switch fuse units fitted with 30 Amp H.R.C. fuses and cable glands suitable for 4 core P.V.C. cables and labeled as :
      No. 9: 'Outdoor Light'
      No. 10: 'Battery Charger'

No. 11: 'Water Supply'
No. 12: 'Spare'

1.5.4. **AFTER SALES SERVICE**: - Service Centre for Battery Bank and Battery Charger shall be available in Guwahati or any places within Assam to attend after sales service of Battery bank and Charger in any Grid substations located in Assam. The bidder shall provide address of service centre along with authorisation etc.

The bidder shall provide a list of personnel and their qualification manning the service centre. The bidder shall provide information whether the service centre keeps stock of mandatory spares, if the spares are not available at local service centre then the minimum time required for obtaining the same from the manufacturer works/ central service centre.

SECTION-2

PRICE BIDDING SCHEDULE-I

(To be submitted in the Part-II, 'Price bid' in a separate sealed envelope in quadruplicate)

SL.	Item	Unit	Qty	Rate per unit (Rs.)							Amount (Rs.)
				Ex works	E.D.	E. Cess	CST/VAT	F & I	Entry tax	FORD	
1	(i)The following Plante Type lead acid station battery bank complete with all accessories , inter cell connectors, dry and uncharged conforming to IS :1652 along with inter row / inter tier connector , required sulphuric acid of 1190 sp gravity and suitable battery stand etc .										
	a. 55 cells plus 2 spares for 110 Volts D.C , 150 Ah	set	3								
	b. 110 cells plus 2 spares for 220 Volts D.C 300 Ah	Set	1								
2	Automatic Float and Boost Battery charger Suitable for charging of Plante Type lead acid stationery battery bank with all accessories										
	a. 150 AH, 110V DC	Set	2								
	b. 300Ah, 220V DC	Set	1								
3	DCDB as per specification	No	1								
4	LTAC panels as per specification	No	1								
5	Supervision of installation & commissioning of	No									
	a. 150 AH, 110V DC, battery bank	No	3								
	b. 300Ah, 220V DC , battery bank	No	1								
	c. 110 V DC Float & Boost Charger										

	d. 220 V DC Float & Boost Charger	No	2								
	e. DCDB	No	1								
	f. LTAC panels	No	1								

NB.

1. Manufacturers of battery bank and Battery charger must have authorised service centres in Guwahati or any places within Assam to attend after sales service as and when required.
2. The quantities are tentative which may increase/decrease as per requirement
3. The same rate shall be applicable for different substation under AEGCL
4. The charges of freight & insurance shall include the following

    i. Packing, forwarding, handling etc
    ii. Cost of transportation by road including unloading at site at shown by the consignee
    iii. Placement of batteries, charger LTAC& DCDB at position as shown by the consignee
    iv. Insurance during transit covering up to delivery at site

5. Road permit shall be arranged by the supplier. Tenderers are requested to quote the rate for entry tax , if applicable. The “Entry tax” if applicable paid by the supplier. However, AEGCL shall reimburse the “Entry Tax” against submission of documentary evidence.

SECTION-3

3.1.1. OTHER TERMS AND CONDITIONS:

3.1.2. Sealed tenders in triplicate (three copies), each complete with full details as per specification vide specification no. AEGCL/MD/SS-154 is invited by the Managing Director, Assam Electricity Grid Corporation Limited, Bijulee Bhawan, Paltanbazar, Guwahati-781001 for the following item.

3.1.3. Name of the item: - Design, manufacture, test, supply and delivery of Battery Bank, Battery Charger, DCDB and LTAC panels for different Grid substation of AEGCL.

3.1.4. The cost of the tender documents is Rs. 500.00 (Rupees five hundred) only in the form of Bank draft in favour of Managing Director, office of the Managing Director, AEGCL, Guwahati-781001 and to be submitted along with the tender in 'Part I – Technical & Commercial bid'.

3.1.5. The tender shall be submitted in two separate parts, each in separate sealed covers superscribed as follows.

Part I – Technical & Commercial bid.

Part II – Price bid.

3.1.6. **The tenders should reach/ be submitted in the office of the Managing Director, AEGCL, Bijulee Bhavan, Paltanbazar, Guwahati-781001 on or before 13-30 hours on 05.08.10.**

3.1.7. The Part-I (Technical bid) of the tender will be **opened at 14-00 hours on 26.073.10** in the office of the Managing Director, AEGCL, Bijulee Bhawan, Paltanbazar, Guwahati-781001, in presence of the authorised representatives who desire to be present.

3.1.8. The Part-II (Price bid) of the tender of suitable bidders as per Part-I (Technical & Commercial bid) will be opened separately.

3.1.9. Tenders shall preferably be submitted in person or by registered post with AD. Tenders received late due to delay in postal/ late due to any other reason shall not be considered. The tenders received after due date and time shall be returned unopened by post.

(a) Telegraphic tenders / tenders sent by means of FAX shall not be considered

(b) If for any unforeseen reasons the date of opening of bid turns into a holiday, the tenders shall be opened on the next working day at the specified time

3.1.10. Tender must be accompanied by earnest money deposit (EMD) in the form of Bank Guarantee amounting to Rs. 50,000/- (Rupees fifty thousand) only. Tenders without EMD / EMD of lesser amount shall be rejected outright. G.B format for submission of EMD is enclosed.

No adjustment towards Earnest Money Deposit shall be allowed against any other outstanding amount with Assam Electricity Grid Corporation.

3.1.11. The bidders are to quote 'Firm' prices inclusive of present applicable taxes, duties and freight & insurance charge up to delivery including unloading & placement at site. Detail break up of price is to be furnished. Any other tax, duties, levies what so ever arises but not mentioned are to be borne by the supplier. **Offer for 'Variable' price shall be rejected outright**. Taxes and duties shall be provisional and shall be at actual as per schedule delivery period of purchase order.

3.1.12. The validity of the tender should be 180 days from the date of opening of technical/price bid

3.1.13. Payment terms: Payment terms are as follows:

(a) 100% payment would be admissible on receipt of materials at site in full and in good condition and as per terms and conditions stipulated in the purchase order. The payment as per sub clause (a) will be made only the following conditions.

1. Proforma invoice in triplicate may be submitted to the consignee for arranging fund.

2. Advance copies of bills in triplicate and other information such as challan, packing list etc. shall be furnished to the consignee.

3. Any demurrage charges on account of late information and / or delivery of documents by the bank are to be borne by the supplier.

4. No payment shall be made unless performance Security deposits Bank Guarantee as per clause no 9.0 of AEGCL's " General Terms and conditions of supply & erection 2009" are furnished

5. All bank charges are to be borne by the supplier

3.1.14. Delivery period: The delivery at site shall be completed within 3 (three) months from the date of technically and commercially purchase order. Delivery is to be done through Bank approved transporter by road..

3.1.15. Name and address of the consignee: As per purchase order.

3.1.16. Destination of delivery: As per purchase order

3.1.17. Telephone no/ Fax no/ address of the Managing Director, AEGCL is "The Managing Director, AEGCL, Bijulee Bhawan, Paltanbazar, Guwahati- 781 001. Telephone no/ Fax no: 0361- 2739513

3.1.18. After sales service/ Service Centre: - Service Centre for Battery Bank and Battery Charger shall be available in Guwahati to attend after sales service of Battery bank and Charger in any Grid substations located in Assam.

3.1.19. Al other terms and conditions unless specifically mentioned herein subjected to the " General Terms and Conditions of supply & erection 2009"

3.1.20. The Managing Director, AEGCL is not bound to accept the lowest quoted tender and reserves the right to reject any or all tenders without assigning any reason thereof.

Managing Director
AEGCL

ANNEXURE - 1

ABSTRACT OF TERMS & CONDITIONS

Following information is to be furnished in the 'Technical and Commercial bid' (PART – I) as first page.

(Please tick mark where necessary.)

1)	Earnest money (EMD)	:Submitted/Not submitted
	a) Amount of EMD	:Rs.
	b) Submitted in the form of	
	i) Bank Guarantee	: Yes/No.
2)	Validity of the offer	: ……. days from the date of opening of 'Technical & Commercial Bid' & 'Price bid'.
3)	Nature of price offered	
	i) 'FIRM' Price	**: Yes/No**
4)	Terms of payment (Whether agreeable to accept payment as specified in clause-3.1.13 of 'Other terms & conditions' 'Section -3' of Specification)	: Yes/No
5)	Date of completion of supply. (Please specify the date of completion of supply as per specification)	: Yes/No
6)	Guarantee (Whether agreeable to accept as specified in " General Terms and conditions of supply and erection of AEGCL - 2009"	: Yes/No
7)	Delay in delivery or commissioning (Whether agreeable to accept Clause no- 26 of 'General conditions of supply & erection' of AEGCL 2009)	: Yes/No
8)	'Performance Security Deposit" (Whether agreeable to accept as specified in Clause no- 9.0 of 'General Terms and conditions of supply and erection of AEGCL - 2009)	: Yes/No
9)	Sales tax clearance certificate of the current year furnished	: Yes/No
10)	Whether the material bear ISI mark	: Yes/No
11)	Whether the material bear ISO certificate	: Yes/No
12)	Whether guaranteed technical particulars as per the	: Yes/No

specifications are furnished

13) Whether drawing etc. as per specification are furnished : Yes/No

14) List of orders executed for similar works furnished : Yes/No

15) Performance certificate from the various SEB and other organisations furnished : Yes/No

16) Deviation from the specification

    a) Technical : Yes/No

    b) Commercial : Yes/No

17) Information in respect of technical capability is furnished : Yes/No

18) Information in respect of Financial capability certificate from the Banker is furnished : Yes/No

19 Whether Service Centre available in Guwahati , if yes , furnish address and contact No :- Yes/ No

It is certified that the rates have been quoted as per terms and conditions laid down in the tender specification and without any deviation.

Date: Signature of tenderer with seal

BANK GURANTEE FORM

Bank guarantee no…….. dated……

The Bank of ……. hereby agrees unequivocally and unconditionally to pay, within 48(forty eight) hours, on demand in writing for the ASSAM ELECTRICITY GRID CORPORATION LIMITED (AEGCL) OR ANY OFFICER AUTHORISED by it in this behalf, of any amount up to and not exceeding Rs……..(Rupees……) only to the said……..who have participated in the tender for '……..' against specification no. AEGCL/MD/SS-……. Invited by the Managing Director, AEGCL.

This agreement shall be valid and binding on this Bank up to and including Rs……..(Rupees……..) and shall not terminable by notice or any change in the constitution of the Bank or the firm or contractors or by any persons whatsoever & liability here under shall not be impaired for discharged by any extension of time or variations or alternations made given, concerned to agree with or without our knowledge or consent, by or between the parties to the said written contract.

Our liability under the Guarantee is restricted to Rs……..(Rupees ……..……..) only. Our Guarantee shall remain in force and valid till……..…unless a suit or action to enforce a claim under the Guarantee is filed against us within 6(six) months from the aforesaid date & all your rights under the said Guarantee shall be forfeited and we shall be relieved and discharged from all liability thereon.

Signed……

For……

Bank……..