



North Eastern Electric Power Corporation Ltd.
(A Government of India Enterprise)
An ISO 9001, 14001 & OHSAS 18001 Corporation

CONTRACT AND PROCUREMENT WING (E)
KOPILI H.E. PLANT:: DIMA HASAO DISTRICT: UMRONGSO – 788931
Website-www.neepco.gov.in,
Fax: 03670- 288240
CORRIGENDUM AGAINST NOTICE INVITING TENDER NO.
KHEP/C&P(E)/2016/250 dtd 20-01-2016

The BG Format (Annexure-CPG) & Schedule of Technical Specification (Annexure-A) against NOTICE INVITING TENDER NO. KHEP/C&P (E)/2016/250 dtd 20-01-2016 for supply, delivery including installation, testing and commissioning of a 40 KVA Silent Generator to Administrative Block of Kopili Hydro Electric Plant, Umrongso, Dist. Dima Hasao, Assam are enclosed herewith.

All other terms and condition of NIT shall remain unchanged.

Encls: i) BG Format (Annexure-CPG)
ii) Schedule of Technical Specification (Annexure-A)


10/2/16
Manager (E/M)
Contract and Procurement (E)
Kopili H.E. Plant: NEEPCO Ltd.
Umrongso,

Proforma of Bank Guarantee for Contract Performance
(To be stamped in accordance with Stamp Act)

Ref.....

Bank Guarantee No.....

Date

To,

.....

Dear Sir,

In consideration of the North Eastern Electric Power Corporation Ltd.; (hereinafter referred to as the "Purchaser" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators or and assigns) having awarded to M/s

.....
 with its Registered/Head Office at

.....
 (hereinafter referred to as the "Contractor" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators or and assigns) a contract by issue of Purchaser's Letter of Intent No dtd and the same having been unequivocally accepted by the Contractor resulting in a "Contract" valued at Rs

.....
 (Rupees.....)

only for

(Scope of the Contract)

and the Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire Contract equivalent to 10 (ten) percent of the said value of the Contract to the Purchaser.

We

(Name and address of the Bank)

having registered Office at (hereinafter referred to as the "Bank" which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors or and assigns) do hereby guarantee and undertake to pay the purchaser, on demand any and all money payable by the Contractor to the extent of as aforesaid at any time upto (day/month/year) without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Purchaser on the Bank shall be conclusive and binding notwithstanding any difference between the Purchaser and Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other Authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Purchaser and further agree that the guarantee herein contained shall continue to be enforceable till the Purchaser discharges this guarantee.

The Purchaser shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the contract by the Contractor. The Purchaser shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner, and either to enforce or to forbear to



enforce any covenants, contained or implied, in the Contract between the Purchaser and the Contractor or any other course or remedy or security available to the Purchaser. The Bank shall not be released of its obligations under these presents by any exercise by the Purchaser of its liberty with reference to the matters aforesaid or any of them or by reason or any other acts of omission or commission on the part of the Purchaser or any other indulgence shown by the Purchaser or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

The Bank also agrees that the Purchaser at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor in the first instance without proceeding against the Contractor and not withstanding any security or other guarantee the Purchaser may have in relation to the Contractor's Liabilities.

The liability or obligation of the Bank under this guarantee bond shall not be affected or suspended by any dispute between the purchaser and the supplier and the payment under this guarantee bond need not wait till the disputes are decided by a Competent Court or Tribunal or any other authority and that any payment made by the bank to the purchaser under the guarantee bond shall be deemed to have been rightfully and lawfully made.

Lastly the Bank also assures that the guarantee bond will not be discharged due to the change in the constitution of the bank or the contractor.

Not withstanding anything contained herein above our liability under this guarantee is restricted to Rs..... (Rupees.....) only and it will remain in force upto and including.....and shall be extended from time to time for such periods as may be advised by the Purchaser who is the beneficiary under this guarantee and in the event if the Contractor fails to comply such extension within the validity period, this shall be treated as a claim by the purchaser on the Bank.

Dated this day of 200 at

Witness

.....
(Signature)
.....
(Name)

(Signature).....

(Name)

Designation with
Bank Stamp.....
Authority as per Power
Of attorney No.....

.....
(Official Address)

Dated

- Note: (1) This sum shall be ten percent (10%) of the "Contract Price".
(2) The date of validity of this Bank Guarantee will be ninety (90) days after the end of the warranty period or as specified in the Contract.
(3) The BG shall be submitted preferably from a Nationalized Bank

Detailed Technical specification:

- I This specification covers the supply, installation and testing of power Supply System 40kVA silent DG set.
 - i) 40 kVA (at NTP) Silent DG set
 - ii) Acoustic container of suitable size
 - iii) AMF control panel with auto/manual facility, monitoring instruments and protective devices for DG set
 - iv) Starting - 1 Nos of maintenance free battery of 12 V, 180 ampere hour capacity of EXIDE or equivalent make for each 40kVA DG set shall be provided for Engine cranking and DC controls.
 - v) Anti vibrations mounts for DG sets & control panel
 - vi) Documents

2. Brief Description

- 2.1 Genset shall comprise of Diesel engine which will be coupled to AC brush less, self excited and self regulated type Generator (40 kVA, 415V, 3 phase, 50 Hz at 1500 rev/min) through a closed coupling with disc type couplers. The genset shall also include fuel tank, toolbox, control panel, spare box and batteries for engine cranking.

3. Safety

- 3.1 All exposed parts, which are energized electrically and all reciprocating or rotating parts, which are of such nature or so located as to become a hazardous shall be insulated, fully enclosed or guarded properly.
- 3.2 All metals parts which are not supposed to be electrically live shall be effectively bound together (to ensure good conductivity) to a common Brass earthing terminal which shall be easily accessible. Necessary earthing spike with copper braided cable shall be provided for effective earthing of the **Genset 40kVA** to avoid electric shock.
- 3.3 To ensure firm electric connection, terminal strips, lugs, plug-sockets etc shall be used. Electrically live cable ends shall be covered with tight sleeve.

4 Accessibility

- 4.1 Construction and layout of components shall be simple for operation and maintenance.

Easy accessibility of the following parts shall be ensured:

- i) Diesel tank out let tap and cap with robust chain duly secured to body of set.
- ii) Oil sump dipstick, cap and drain plug with an extension pipe.
- iii) Earthing terminals
- iv) Tool box
- v) ON/OFF switch
- vi) Plug/ Sockets



5. Diesel Engine

- 5.1 The Diesel engine conforming to ISO 3046 -1998 or equivalent standard is to be used as prime mover for the genset.
- a) Make - Cummins / Kirloskar / Greaves/ Catterpillar/ Mistubishi or any equivalent and reputed make.
 - b) Rating - minimum 56BHP @ 1500 rev/min at std. ref. conditions
 - c) Governing - Speed variation under any load will be minimum
 - d) Aspiration - Turbo charged intercooled
 - f) Noise level - 75 dB or below at 1 meter distance from the acoustic system
 - g) Cooling system- Water cooled.

6. A.C. Generator

- 6.1 The A.C. brushless generator shall capable of meeting the following performance parameters:
- a) Make for Alternator: Stamford/ Kirloskar/Crompton / Kirloskar Green/ NGEF or equivalent of any other reputed make.
 - b) Type - Self excited and regulated brushless
 - c) Continuous output - 40 kVA at 50 Hz, 0.8 pf. lag at NTP
 - d) Speed - 1500 rev/min
 - e) Class of insulation - 'H'
 - f) Voltage - 415 volt (generated voltage) 3 phase, 4 wire (neutral)
 - g) Voltage regulation - Variation within +/- 1%
 - h) Frequency - 50 Hz
 - i) No. of phases - Three phase four wire system with neutral
 - j) Duty cycle - Continuous rated load for 8 hrs.
 - k) Neutral earthing - Neutral should be earthed separately with breaker
 - l) Efficiency - > 85%

7. Mounting arrangement:

Engine & Alternator are to be floor mounted on a common MS fabricated base frame. Base frame with integral fuel tank is to be provided with drain plug, air vent, inlet and outlet connection, level indicator and provision for protection.

8. AMF Control Panel

- 8.1 The control panel shall have two modes of operation
- i) Auto mode
 - ii) Manual mode
- 8.2 The controller shall have scrolling facility for monitoring the
- (i) Voltage (ii) Frequency (iii) Current (iv) Power Factor (v) KWH. (vi) RPM Gen set and the common load.
- 8.2 The Control Panel shall be designed to provide Alarm Indications along with Relay Output. All electrical parameters shall be continuously scrolling on the LCD display.

Various fault conditions like LOP, Over Speed, Over Load, Low Fuel Level, Fail to Start etc. shall be annunciated with indication on error message.

8.3 Control panel shall have Start/ Stop indications for manual operations as under:-

8.4 A system comprising of visual indication & auto trip shall be provided to safeguard the Genset against the following fault conditions: -

Overload Short circuit	Overload Short circuit
Low lubricating oil pressure (L.L.O.P)	High cylinder head temperature
V belt failure	Single phasing
Over speed	Over voltage
Under voltage	Over/under frequency

9. Documents

The following literature/ manuals supplied along with the DG sets

- (a) User Hand Book
- (b) Technical Manual

10 . Earthing Spike

GI earthing spikes with copper braided wire of suitable length shall be supplied for earthing of of the 40 kVA genset. The GI spikes shall have provision to bolt the earth wire rigidly on it.

11. Non Contact Thermometer

Non-contact thermometer to measure the temperature shall be supplied along with system.

12. Accessories

Each acoustic container shall contain following accessories in addition to the gensets and control panel

- i) AC & DC lights at genset cabin
- ii) Tool box - 1 No.

Manager (E/M), C&P (E)
KHEP, NEEPCO Ltd., Umrongso
Dima Hasao, Assam