HLL LIFE CARE LIMITED (A Government of India Enterprise) P.B.NO. 2, PEROORKADA.P.O., THIRUVANANTHAPURAM - 695 005 KERALA, INDIA

INVITATION FOR BIDS (IFB) (TECHNICAL BID & PRICE BID)

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 750KVA-LT DIESEL GENERATOR SET

AT

PEROORKADA FACTORY, THIRUVANANTHAPURAM, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

HLL LIFECARE LTD (A GOVERNEMENT OF INDIA ENTERPRISE) P.B.NO.2, PEROORKADA.P.O. THIRUVANANTHAPURAM – 695 005 KERALA, INDIA Email: <u>materialsnft@gmail.com</u>, materialspft@lifecarehll.com Ph. (++ 91 471) 2437270, 2435325 Fax: (++ 91 471) 2435013

INVITATION FOR BIDS (IFB)

Tender no. : PUR/08/R1/PQ/ DG SET /2013-14 Date : 27/06/2013

HLL Lifecare Limited (HLL) invites sealed and super scribed bids under two bid system (Technical & Price bid) for Supply, Installation, Testing, Validation and Commissioning of 750 KVA-LT Diesel Generator Set at HLL Lifecare Limited, Peroorkada Factory, Thiruvananthapuram.

The technical specification and other terms and conditions are given in the Tender documents, which can be had from our Website at www.lifecarehll.com & CPP portal (www.eprocure.gov.in). The tenderers can download the documents from our website & CPP portal and in such case the tender fee of Rs. 520/-should be paid by way of DD along with technical bid.

The Bidder is expected to examine the specifications and terms and conditions in the Bid Documents.

Any subsequent changes / amendments will be published only in our website & CPP portal.

Completed tenders in sealed cover superscribed with Tender No. should reach latest by 18/07/2013; 2.00 P.M. at the following address

Joint General Manager (Purchase) HLL Lifecare Limited, P.B.No. 2, Peroorkada P.O., Thiruvananthapuram -- 695005 Kerala. India. Ph. (++ 91 471) 2437270,2433459,2435325 Fax: (++ 91 471) 2435013

The scheduled date for issue, receipt and opening of bids is as follows.

- a) Date of issue of tender document 27/06/2013 onwards.
- b) Last date and time for receipt of bids 18/07/2013 to 14.00 Hrs.
- c) Date and time of opening of Technical bids 18/07/2013, 16.00 Hrs.

Bids will be opened in the presence of Bidders representative(s) who choose to attend on the specified date and time, at the office of HLL at the address given above.

In the event of the date specified for bid receipt and opening being declared as a closed holiday for HLL's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

HLL may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of the HLL and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended. HLL will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids sent by email will not be accepted. The company reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject or cancel the tender without assigning any reason there of.

JOINT GENERAL MANAGER (PURCHASE)

HLL LIFECARE LIMITED (A Government of India Enterprise) THIRUVANANTHAPURAM-695 005, KERALA, INDIA

CONTENTS OF BIDDING DOCUMENTS

I. INSTRUCTION TO BIDDERS:

II. TECHNICAL BID FORMS

1. Schedule A	-	Specifications
2. Schedule B	-	Prequalification Requirements
3. Schedule C	-	Application for Prequalification
4. Schedule D	-	Details of major installations (min 3nos.) of
		similar work completed successfully as prime
		contractor during the last 3 years
5. Schedule E	-	Details of ongoing installations or orders in
		hand for similar works
6. Schedule F	-	Technical Specification
7. Schedule G	-	Acceptance form
7. Schedule H	-	Terms and conditions
8. Schedule I	-	Certificate

III. PRICE BID FORMS

1. SCHEDULE J - Rate Schedule for supply, installation, testing, validation and commissioning of 750KVA-LT diesel generator set

Page 1 of 4

HLL LIFECARE LIMITED (A Government of India Enterprise) THIRUVANANTHAPURAM-695 005, KERALA, INDIA

INSTRUCTIONS TO BIDDERS

1. The Bid is intended to procure material as per specification in Schedule-A.

- 2. The Bid comprises of two parts:
 - A. Technical Bid
 - B. Price Bid
- 3. The Technical Bid must be accompanied by EMD of INR 1,50,000/- by way of Demand Draft drawn in favour of M/s.HLL LIFECARE LIMITED (HLL) and payable at Thiruvananthapuram, India
- 4. Both the Bids shall be submitted in sealed covers separately. Tender Nos. of the Technical and Price Bids shall be superscribed on the respective covers in order to clearly identify between the two Bids. The two separately marked Bids enclosed in a single sealed cover with the respective Tender No. mentioned thereon, complete in all respect, addressed to the Joint General Manager (Purchase) HLL LIFECARE LIMITED, Peroorkada P.O., Thiruvananthapuram – 695005, Kerala, India should reach us on or before the due date and time mentioned in the Tender Notification. HLL shall not be responsible for any delay, if any, in the delivery of the bidding document or non-receipt of the same.
- 5. a. The last date of receipt of Techno-Commercial Bid:18/07/2013;15.00 Hrs.b. Date of Opening of Technical Bid : 18/07/2013; 16.00 Hrs.

Page 2 of 4

HLL LIFECARE LIMITED (A Government of India Enterprise) THIRUVANANTHAPURAM-695 005, KERALA, INDIA

INSTRUCTIONS TO BIDDERS

- 6. In the event of the date mentioned above being declared subsequently as holiday for the purchaser's office, the due date for submission and opening of bids will be the next working day at the same venue and time.
- 7. Bids received after the deadline for submission shall not be considered.

8. SECURITY DEPOSIT:

The successful bidder is required to furnish Security Deposit in the form of Demand Draft, drawn in favour of HLL Lifecare Ltd., payable at Thiruvananthapuram OR a Bank Guarantee for an amount equivalent to 5% of the total order value. The EMD of successful bidders will be converted to Security Deposit and will be refunded at the end of contract period. The successful bidder shall arrange for balance after adjusting the EMD amount. Security Deposit shall be retained (B.G. should remain valid) until successful completion of the contract and acceptance of the equipment/works by the purchaser. The Security Deposit will be released against performance guarantee for an amount equivalent to 10% of the total order value, in the form of Demand Draft/TT or Bank Guarantee by the supplier.

 The successful bidder shall forward Security Deposit within 21 days from the date of receipt of the order in the form of Demand Draft OR Bank Guarantee.

Page 3 of 4

HLL LIFECARE LIMITED (A Government of India Enterprise) THIRUVANANTHAPURAM-695 005, KERALA, INDIA

INSTRUCTIONS TO BIDDERS

- 10. The Bidder is expected to examine all specifications, Instructions, Forms, terms and conditions given in the Bidding documents. Failure to furnish all information required in the Bidding documents or submission of a Bid not substantially responsive to the bidding documents in every respect will be at the Bidders risk and may result in rejection of the Bid. Any clarification required will have to be obtained one week prior to the date of opening of the "Technical bid".
- 11. A Certificate/Declaration as given in Schedule I stating that **ALL TERMS AND CONDITIONS** of this Tender is acceptable should accompany the tender failing which the tender is likely to be summarily rejected.
- 12. The Price Bid of those Tenderers who qualify in the Technical Bid only will be opened. The date and time of opening of price bid will be intimated separately. The Price Bids of Tenderers who do not qualify shall be returned unopened.
- 13. The EMD may be forfeited:
- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Document; or
- (b) In case of the successful Bidder, if the Bidder fails:
 - (i) to sign the agreement.
 - (ii) to furnish security deposit.
 - (iii) does not accept the correction of his bid price pointed out by HLL

14 A complete set of bid document can be downloaded from the website <u>www.lifecarehll.com</u>. For any clarifications connected to the tender, please contact

Joint General Manager (Purchase), Phone No. +91 – 471-2435325, Email: <u>materialspft@lifecarehll.com</u>, materialsnft@gmail.com

•••••

Schedule A Page 1 of 15

HLL LIFECARE LIMITED (A Government of India Enterprise) THIRUVANANTHAPURAM-695 005, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 750KVA-LT DIESEL GENERATOR SET AT PEROORKADA FACTORY, TRIVANDRUM, KERALA, INDIA

Supply, installation, testing, validation and commissioning of 750 KVA LT (600 KW at 0.8 pf.) Diesel generating set comprising of Diesel engine with all accessories, alternator with all accessories, ACB panel, control panel, neutral grounding panel and all other details described below as per relevant IS/BS/IEC specifications.

	RECOMMENDED MAKES OF EQUIPMENT/MATERIAL			
SL.NO	DESCRIPTION	MAKE		
1	Diesel Engine	Cummins / Caterpillar / Kirloskar		
2	Alternator	Stamford / Kirloskar / TOYO DENKI		
3	Contactor	G E/ Schineider / Siemens / L&T / ABB		
4	L T switches	G E/ Schineider / Siemens / L&T / ABB		
5	Cables	Gloster/ Finolex / Havells		
6	Relays (digital)	G E/ Schineider / Siemens / L&T / ABB/ OMRON		
7	Meters	IMP/ Rishab / Conzerve		
8	Lead acid batteries	Exide / G Y/ Panasonic/ fiam / Amron		
9	Motors	ABB/ Siemens / CG		

Schedule A Page 2 of 15

A Engine

Diesel engine shall deliver sufficient BHP at full load at 1500 rpm for powering alternator of 750 KVA (600 KW at 0.8 pf) and shall be turbo charged after cooled type conforming to BS: 5514 with an overload capacity of 10% for one hour in any 12 continuous hours of operation. The engine shall be suitable for cold starting and shall be equipped with all accessories. The materials used should be noncorrosive. Main items are detailed below.

Protection enclosures are not required for the DG set as it is planned to be placed in an acoustic DG room in HLL

1. <u>Generator set specifications</u>

- a) Governor regulation class: ISO8528 Part 1 Class G3
- b) Voltage regulation, no load to full load : $\pm 0.5\%$
- c) Random voltage variation: ± 0.5%
- d) Frequency regulation: Isochronous
- e) Random frequency variation: ± 0.25%
- f) Rated Power output 750kVA (600kW at 0.8pf)
- g) Rated Voltage 240/415Volts, 50Htz, 3Phase
- h) AC entrance box

2. Fuel System

The fuel system designed for high speed diesel fuel having a micro processor controlled Fuel injection system consisting of

- a) Fuel pump
- b) Injectors
- c) Fuel filters
- d) Self contained piping
- e) Spin-on fuel filter with water separator

Schedule A Page 3 of 15

3. <u>Cooling System</u>

- a) Coil cooler with adequate capacity
- b) Forced air cooler
- c) Thermostat
- d) Corrosion resistor
- e) Self contained piping

Note Heat exchanger shall also be of the engine manufacturer.

4. Lubricating System

Lubricating system consisting of

- a) Oil pump, engine mounted
- b) Filters (Fleetguard dual venturi spin-on, combination full flow and bypass filters)
- c) Lube oil cooler
- d) Self contained piping
- e) Pre-lube pump with starter and all necessary piping

5. <u>Air system</u>

Air intake system consisting of

- a) Dry type filters
- b) Air intake manifold
- c) Turbocharger with after cooler (exhaust gas driven)

6. Exhaust System

Exhaust system consisting of

- a) Exhaust manifold with **expansion joint**
- b) Flexible pipings
- c) Exhaust silencer (Residential type)

- d) Exhaust piping with support structure to take the pipes up to above roof slab of the building.
- e) The portion of exhaust pipes / silencers inside the DG room have to be provided with thermal lagging using glass wool of appropriate type with aluminium cladding.
- f) Exhaust meeting bharath-2 emission standards as per CPCB-2 regulations.

7. <u>Governing system</u>

Governing system shall consist of electronic governor with 1% or better steady state speed regulation (no load to full load speed variation) and suitable for parallel operation with similar DG set in future. Governer regulation class: ISO8528 part1 Class G3. Voltage regulation(No load to full load) : +/- 0.5%. Random Voltage variation : 0.5%

8. <u>Starting system</u>

Starting system shall consist of

- a) DC starter motor
- b) Battery charging alternator with built in regulator.
- c) Separate static type charging unit for charge during idle periods.
- d) One set of battery at required voltage and 200 AH capacity with suitable sturdy stand, leads and terminals. Coupling arrangement with flexible coupling, flywheel with housing and coupling guard.

Schedule A Page 5 of 15

9. Engine mounted Instrument panel consisting of

- a) Starting switch with key
- b) Water temperature gauge
- c) Lube oil pressure gauge
- d) Hour meter for recording hours run at 1500 rpm
- e) Warning details/history

10. <u>Safety controls shall be provided for</u>

- a) High water temperature
- b) Low lube oil pressure (**alarm provision**)
- c) Over speed
- d) Lube oil priming pump with auto start facility
- e) Lube oil priming pump interlock with engine start facility.
- f) Crank case door should have explosion damper

11. Base Frame

Engine and alternator shall be aligned and assembled on a sturdy base frame made of high quality MS channels with pre-drilled bolt holes for installation on concrete plinth.

12. <u>Fuel Tank</u>

Day fuel tank of 1000 ltr capacity with inlet, outlet pipe connections, valves, filling cap, drain plug, air vent, and level indicator with graduated scale and mounted on floor. All fuel piping from tank to engine are included in the work including pressurizing and leak test.

Alternator

- a) Alternator shall be of capacity 750 KVA/600KW at0.8 pf continuous operation rating at 1500 rpm.
- b) Self excited self regulated brush less type with exciter field controlled by separate/panel mounted solid state voltage regulator, and regulation of +/- 1% of rated voltage from no load to full load.
- c) Class 'H' insulation, floor mounted, self-ventilated SPDP enclosure (IP:23).
- d) Alternator shall be suitable for tropical climate and saline atmosphere and generally conforming to IS:4722,BS:5000,IEC34-1.
- e) Adequate size terminal boxes shall be provided for 450 volts 3 phase 3 wire 50Hz with neutral terminals brought out separately.
- f) The alternator should be double bearing type.
- g) The alternator should be provided with AVR facility.
- h) Standard temperature rise should within 100 °C standby at 40
 °C ambient. Exciter type can be permanent magnet generator.
- i) Direct drive centrifugal blower fan for alternator cooling.
- j) The AC waveform total harmonic distortion should be less than
 5% for no load to full linear load and less than 3% for any single harmonic.

B. <u>ACCESSORIES</u>

- 1. One Set of space heater with switch and indicator. Switch and indicator shall be mounted on control panel.
- 2. 6 Nos. RTD for winding temperature detection.
- 3. 2 Nos. bearing temperature detectors.
- 4. RTDs and BTDs shall be connected to scanner mounted on Panel.

Schedule A Page 7 of 15

5. Earthing terminals 2 Nos. of adequate capacity shall be provided on alternator.

C GENERATOR PANEL

The generator panel shall consist of a control panel, breaker panel. The control panel providing governing, voltage regulation, engine protection and operator interface functions.

Major features include:

-Protective Relay providing a full range of alternator protection functions that are matched to the alternator provided.

-Battery monitoring and testing features and smart starting control system.

- Three phase sensing, full wave rectified voltage regulation system for all load types.

- Control suitable for operation in ambient temperatures from -40 °C to +70 °C

Operator/display panel

- Off/manual/auto mode switch
- Manual run/stop switch
- Panel lamp test switch
- Emergency stop switch
- Exercise switch

- Alpha-numeric display with pushbutton access for viewing engine and alternator data and providing setup, controls and adjustments

- LED lamps indicating not in auto, common warning, common shutdown, remote start

- Configurable for local language

Schedule A Page 8 of 15

Engine protection

- Over speed shut down
- Low oil pressure warning and shut down
- High coolant temperature warning and shut down
- High oil temperature warning
- Low coolant level warning or shut down
- Low coolant temperature warning
- High and low battery voltage warning
- Weak battery warning
- Dead battery shut down
- Fail to start (over crank) shut down
- Fail to crank shut down
- Redundant start disconnect
- Cranking lockout
- Sensor failure indication

Engine data

- DC voltage
- Lube oil pressure
- Coolant temperature
- Lube oil temperature
- Engine speed
- Engine ECM data

Protections

The following protective relays shall be provided.

- a) Microprocessor based 3 over current and 1 earth fault relay with Instantaneous Hi set unit.
- b) Instantaneous differential relay for alternator windings
- c) Field failure relay

Schedule A Page 9 of 15

- d) Reverse power relay
- e) Under voltage relay
- f) Over voltage relay

Note: Necessary CTs of adequate burden, capacity and appropriate ratio shall be provided for the above relays. CTs shall be resin cast type of class 5P 10.

ACB and engine shall trip in the event at the following.

- 1. High coolent temperature
- 2. Low lube oil pressure
- 3. Over speed
- 4. Differential fault or on any other major faults
- 5. High lube/engine temperature

Metering

The following digital meters shall be provided.

- a) Ammeter with selector
- b) KV meter with selector
- c) Power factor meter
- d) Frequency meter
- e) DC Ammeter for field current
- f) DV Voltmeter for field voltage
- g) Trivector meter (L & T make only)
- h) KVA meter
- i) Energy meter (Conzerve 6433)

Note: Necessary CTs of adequate burden, capacity and appropriate ratio shall be provided for the meters. CTs shall be resin cost type of class 0.5 accuracy.

Schedule A Page 10 of 15

Indications

Multiple LED type indication shall be provided for the following.

a)	Generator ON	(Red)
b)	ACB ON	(Red)
c)	ACB OFF	(Green)
d)	ACB spring charged	(Blue)
e)	Trip circuit healthy with push button	(white)

Push Buttons

- a) Engine start
- b) Engine stop
- c) Fault accept/reset
- d) Speed raise
- e) Speed lower

Auto scanner

Eight-channel auto scanner shall be provided and connected to the 6 Nos. winding temperature detectors and 2 Nos. bearing temperature detectors to display the values sequentially.

Annunciation system

Annunciation system shall consist of audio alarm and visual indication complete with fault accept/reset push button, for the following.

- a) Low lube oil pressure
- b) High coolent temperature
- c) Engine over speed
- d) Over voltage
- e) Under voltage
- f) Over current and earth fault
- g) Differential fault

Schedule A Page 11 of 15

- h) Field failure
- i) Reverse power

Note: All control cabling necessary for the scheme shall be included.

2. Circuit Breaker Panel

Indoor type front operated Circuit Breaker panel suitable for operation on 415 V, 3 phase, 50 Hz. AC complete with power and control wiring, inter connections, TP tinned copper bus bar with sleeves and non hygroscopic high dielectric strength bus bar support insulators, earth bus, painting complete and consisting of 1 No. of breaker having motor charged spring closing mechanism with manual charging and close/ trip facility vacuum circuit breaker with 230V, 50 Hz. Single phase AC motor dust and vermin proof totally enclosed in sheet steel housing, fully interlocked, horizontal draw out type with trip free mechanism, mechanical ON / OFF and spring status indicator, earthing terminal, automatic safety shutters, complete with auxiliary contacts and service position micro switch. The following shall be provided on the CB panel.

- 1. Red and green colour indicating lamps LED type as detailed in previous section for ON and OFF.
- 2. Blue colour lamp to indicate spring charged condition.
- 3. Current transformers for metering and protection detailed in previous section (Resin cast type).
- 4. Spring charging motor ON / OFF switch.
- 5. Overload/ Short circuit/ Ground fault protection
- 6. Closing coil.
- 8. Shunt trip coil.
- 9. Mechanical close and trip knobs.
- 10. The ACB panel shall be extendable on one side to accommodate future panels.

Schedule A

Page 12 of 15

4. All the electrical works till the main LT Breaker point of DG control panel will be under the scope of the party.

Control Supply Voltages

1)	Closing coil	-	24 V DC
2)	Tripping coil	-	24 V DC
3)	Indication circuit	-	24 V DC
4)	Auxiliary relay	-	24 V DC
5)	Microprocessor relay	-	24 V DC
6)	ACB motor	-	230 V AC 1 ph
7)	Digital meters auxiliary supply		- 110V AC from PT

ACCEPTANCE TESTS

The following routine/ acceptance test in presence of M/s. HLL's representative will be performed at the place of manufacture before dispatch without any extra charges.

Checking of weights, dimensions, fitting and accessories, tank sheet thickness, oil quality, material, finish and workmanship as per GTP and contract drawings. Physical verification.

QUALITY ASSURANCE PLAN:

The bidder shall invariably furnish following information along with his bid, failing which his bid shall be liable for rejection. Information shall be separately given for individual type of equipment offered.

 Statement giving list of important raw materials, names of subsuppliers for the raw materials, list of standards according to which the raw materials are tested, list of tests normally carried out on raw materials in the presence of bidder's representative, copies of test certificates. Information and copies of test certificates as above in respect of bought out accessories.

- 2. List of manufacturing facilities available.
- 3. Level of automation achieved and list of areas where manual processing exists.
- 4. List of areas in manufacturing process, where stage inspections are normally carried out for quality control and details of such tests and inspection.
- 5. List of testing equipment available with the bidder for final testing of equipment along with valid calibration reports. These shall be furnished with the bid. Manufacturer shall posses 0.1 accuracy class instruments for measurement of losses. Quality Assurance Plan (QAP) with hold points for M/s HLL's inspection.

STANDARDS

The materials shall conform in all respects to the relevant Indian / International Standards with latest amendments thereof, complying customer requirements and specifications.

DOCUMENTATION

1 The bidder shall furnish along with the bid the dimensional drawings of the items offered indicating all the fittings.

2 Dimensional tolerances.

3 Weight of individual components and total weight.

4 An outline drawing front, elevation and plan where in the principal dimensions shall be given.

5 Typical general arrangement drawing showing sides and end-elevation and plan of the diesel generator.

Schedule A Page 14 of 15

PACKING AND FORWARDING

The packing shall be done as per the manufacturer's standard practice. However, it should be ensured that the packing is such that, the material would not get damaged during transit by Rail/ Road. The marking on each package shall be as per the relevant IS.

MANADATORY SPARES

Mandatory spares shall be supplied as per requirement.

GUARANTEE

The manufacturers of the DG set shall provide a guarantee of 12 months from the date of commissioning. In case the diesel generator fails within the guarantee period the purchaser will immediately inform the supplier who shall take back the failed DG set within 15 days from the date of the intimation at his own cost and replace/repair the DG set within forty five days of date of intimation with a roll over guarantee. The outage period i.e. period from the date of failure till unit is repaired/ replaced shall not be counted for arriving at the guarantee period. In the event of the supplier's inability to adhere to the aforesaid provisions, suitable penal action will be taken against the supplier which may inter alia include blacklisting of the firm for future business with the purchaser for a certain period.

DEVIATIONS

The bidders are not allowed to deviate from the principal requirements of the Specifications. However, the bidder is required to submit with his bid in the relevant schedule a detailed list of all deviations without any ambiguity. In the absence of a deviation list in the deviation schedules, it is understood that such bid conforms to the bid specifications and no post-bid negotiations shall take place in this regard.

Schedule A Page 15 of 15

The discrepancies, if any, between the specification and the catalogues and / or literatures submitted as part of the offer by the bidders, shall not be considered and representations in this regard shall not be entertained. If it is observed that there are deviations in the offer in guaranteed technical particulars other than those specified in the deviation schedules then such deviations shall be treated as deviations.

All the schedules shall be prepared by vendor and are to be enclosed with the bid.

PLACE: DATE : NAME & SIGNATURE OF THE APPLICANT (WITH OFFICE SEAL)

Schedule - B Page 1 of 3

HLL LIFECARE LIMITED

(A Government of India Enterprise) PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 750KVA-LT DIESEL GENERATOR SET AT PEROORKADA FACTORY, TRIVANDRUM, KERALA, INDIA

PREQUALIFICATION REQUIREMENTS

- 1. The tenderer should have minimum 5 years experience in the relevant field.
- 2. The tenderer should have completed at least five works similar in nature in single contracts – in the same name and style as prime contractor) costing not less than Rs.75 Lakhs each during the last 3 years. For the purpose of this clause.
 - a) 'Similar work' shall mean complete work including supply, installation, testing, validation and commissioning of 750kVA Diesel Generator
 - b) Cost of work shall mean the cost of work executed excluding cost of materials/equipment supplied by the department or agency. Certificate of satisfactory completion of work obtained from an officer not below the rank of an executive engineer in the case of Government departments or from an officer of equivalent position in the case of other organization shall be produced.

Schedule - B Page 2 of 3

The certificate will clearly indicate the name of work completed, period during which completed (giving date of commencement and date of completion of cost work). The certificate should bear the name, signature and seal of the officer. In the absence of such a certificate the tender may not be considered.

- Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least Rs twenty five crores (25 Crores)
- 4. The tenderer should submit Earnest Money Deposit in the manner specified along with the tender document.
- 5. The tenderer should have adequate number (Min 2Nos.) of qualified engineers, technical persons. <u>They should have a minimum 5 years</u> <u>experience in the relevant field for executing the work.</u>
- 6. The tenderer should have adequate construction machineries tools and equipments for the execution of the tendered work.
- 7. Power of Attorney in case an authorized representative has signed the tender.
- 8. The duly signed acceptance form conforming that All terms & conditions, technical specifications, drawings & volume of job are understood by the bidder Certificate that bid is in total conformity with the specifications and terms and conditions mentioned in the bid document.

- 9. Deviation if any, giving reasons for the deviation.
- 10. Even though the bidder meet the above qualifying criteria, they are subject to be disqualified if they have:
- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc...

HLL does not bind itself to accept the lowest or any tender, and reserves to itself the right to accept or reject any or all the tenders, either in whole or in part without assigning any reason for doing so.

Place: Date: Signature Name and address of the bidder with seal

Schedule - C Page 1 of 3

HLL LIFECARE LIMITED (A Government of India Enterprise) PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

APPLICATION FOR PREQUALIFICATION

NAME OF WORK: SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 750KVA-LT DIESEL GENERATOR SET AT PEROORKADA FACTORY, TRIVANDRUM, KERALA, INDIA

:

1

2

2

- A. Name of Firm/Company
 - 1. Postal address
 - 2. Telephone No FAX E-Mail
 - 3. Year of establishment of firm/Company :

B. In the case of Firm

1. Whether proprietary of partnership firm :

- 2. Name of Managing partner
- 3. Name of other partners

Schedule - C Page 2 of 3

TENDER NO.: PUR/08/R1/PQ/DG SET/2013-14APPLICATION FOR PREQUALIFICATION

C. In the case of Company

1. Whether Private Limited or Public Limited Company :

2. Name of Managing Director

- 3. Name of other Directors
- D. a) Experience in the field (in years):
- b) No. of major installations of similar 750kVA Diesel Generator completed successfully in India, specify. Enclose 3 completion certificates from the client certified that the similar Diesel Generator are installed and commissioned at their site successfully and is working satisfactorily. The client list shall be enclosed. (Cost of work not less than Rs. 75 Lakhs for each work) executed during the last 3 years. Note: Details to be furnished in SCHEDULE D

1

2

:

E. Total No. of ongoing installations of 750kVA Diesel Generator.Note: Details to be furnished in SCHEDULE E

i) If so, give the period and details.

F. Annual turn over of the bidder during the last 3 years

(Refer Schedule B)

Schedule - C Page 3 of 3

TENDER NO.: PUR/08/R1/PQ/DG SET/2013-14APPLICATION FOR PREQUALIFICATION

G. Tax registration details (domestic vendors)

(a) CST No./ VAT No.(b) TIN No.

H. Technical Specification: in SCHEDULE F (filled and enclosed)

I. Acceptance Form in SCHEDULE G

J. CERTIFICATE as per **SCHEDULE H**

I/We hereby certify that the details given in the application form are correct to the best of my/our knowledge. I /We have no objection in contacting any of our clients for reference.

Place: Signature
Date: Name and address of the bidder with
seal

SCHEDULE D

Page 1 of 1

HLL LIFECARE LIMITED (A Government of India Enterprise) PEROORKADA THIRUVANANTHAPURAM-695 005, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

DETAILS OF MAJOR INSTALLATIONS (Min 3Nos.) OF SIMILAR WORK COMPLETED SUCCESSFULLY IN INDIA BY THE TENDERER AS PRIME CONTRACTOR DURING THE LAST 3 YEARS

SI. No.	Name of Client	Details of	Value of	Period of
	with full address,	Installation	works	Completion
	telephone		completed	with dates
	numbers and			(in months)
	nature of work			

THE TENDERER SHOULD HAVE COMPLETED 5 NOS. OF SIMILAR WORKS IN THE LAST 3 YEARS.

SIGNATURE OF BIDDER WITH SEAL

TOTAL NUMBER OF ONGOING INSTALLATIONS OR ORDERS IN HAND FOR SIMILAR WORKS

SI. No.	Name of Client	Order details	Value of works
	with full address,	such as quantity,	
	telephone	completion time	
		1	1

SIGNATURE OF BIDDER WITH SEAL

SCHEDULE F

(TO BE FILLED BY THE BIDDER)

DETAILED TECHNICAL PARTICULARS FOR 750KVA-LT DIESEL GENERATOR SET

	MODEL	MAKE
I	Engine	
1	Make	
2.	Туре	
3.	No. Of cylinders	
4.	Arrangement of cylinders	
5.	Bore and stroke	
6.	R.P.M.	
7.	Method of starting	
8.	Compression pressure	
9.	Compression ratio	
10	Max. cylinder pressure	
11	Piston speed	
12	Fuel injection type	
13	Aspiration method	
14	Fuel injection pressure	
15	Lubricating oil system	
16	Lubricating oil pressure	
17	Fly wheel	
i)	Dia	
ii)	Weight	
iii)	Is it balanced dynamically	
18	Cyclic variation	

19	Time required for starting	
20	Type of governor	
21	Guarantee performance of	
21	governor	
a)	Permanent variations with	
i)	Full load thrown off	
ii)	Full load thrown 'on'	
b)	Temporary variations with	
i)	Full load thrown off	
ii)	Full load thrown 'on'	
22	Head speed regulation limits	
23	Fuel oil recommended	
24	Lubrication oil recommended	
25	BHP at site at output	
	shaft/coupling	
26	Overload capability	
i)	Full load	
ii)	Half load	
27	Mechanical efficiency	
28	Standard mounting	
	accessories on engine	
29	Safety shutdown provision	
30	Direction of rotation	
31	2 stroke or 4 stroke	
32	Type of cooling at sump	
52	capacity	
33	Oil	
34	Any other data	
II. A	Iternator	

1	Make	
2	Туре	
3	Governing specification	
4	Full load output in KVA	
5	Full load output in KW at 0.8	
6	Enclosures	
7	Speed/frequency	
	No. of phases	
9	Is neutral brought out	
10	Voltage between phase/neutral	
11	Regulated band of voltage	
12.	Current carrying capacity of windings	
13.	Percentage imbalance permissible	
i)	full load	
ii)	other loads	
14	Sanctioned over capacity at maximum ambient temp,	
15	Short time overload	
16,	Efficiency	
17	Temporary over load after full load run for 12 months	
18	Insulation starter	
19.	Insulation of rotor	
20.	Excitation method	
21	Excitation amps at full load	
22.	Excitation voltage	
23	Air gap between starter & rotor	
24	Exciter type	

25	Specification for exciter	
III	General	
1	Length of set over all x width overall	
2	Weight of set overall	
3	Head room needed for lifting/servicing	
4	Weight of alternator	
5	Weight of engine	
6	Weight of heaviest part handled	
7	Direction of rotation	
8	Standard accessories	
9	Radiator / Cooling Tower make & type	
10	Fan dia.	
11	C.F .M. of fan static pressure	
12	R.P.M. of fan/type of drive	
13	HP absorbed by run	
14	HP of motor drive in the case of independent motor and its specification	
15	Details of other major unit assembled on set	
16	Capacity of daily service tank	
17	Size of service tank	
	IV Control panel	
1 N	1ake	
2	Туре	

3	Overall dimensions (L x B x H)	
4	Finish	
5	Sheet metal size	
6	Make and type of	
6	contactors/circuit breakers	
7	Make and type of instruments	
•	Make and type of switch fuse	
8	units	
9	Other facilities incorporated	
10	Details of powder coating in	
10	panels	
11	Electrical Works	
	EIECUICAI WUIKS	
J		4

A detailed drawing of DG set having all dimensional details shall be furnished by the manufacturer along with GTP.

SIGNATURE OF BIDDER WITH SEAL

SCHEDULE G

Page 1 of 1

ACCEPTANCE FORM

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

From

То

JOINT GENERAL MANAGER (PURCHASE) HLL LIFECARE LTD PEROORKADA, THIRUVANANTHAPURAM – 695 005 KERALA, INDIA

Dear Sir,

I / We, hereby offer to supply/test/commission the equipment as detailed in schedule hereto or such portion thereof as you may specify in the acceptance of Bid at the price given in the price bid and agree to hold this offer open for one year from the date of bid opening prescribed by the Purchaser. I/We have understood the terms and conditions mentioned in the invitation for bid and Conditions of Contract furnished by you and have thoroughly examined the specifications quoted in the bid document hereto and are fully aware of the nature of the scope of work required and my/our offer is to comply strictly in accordance with the requirement and the terms and conditions mentioned above.

Yours faithfully,

SIGNATURE OF BIDDER WITH SEAL

Schedule - H Page 1 of 7

HLL LIFECARE LIMITED

(A Government of India Enterprise) PEROORKADA, THIRUVANANTHAPURAM-695 005, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

TERMS & CONDITIONS

- 1. The Tender should be completed in all respects. Incomplete tenders are liable to be rejected.
- 2. Unsealed Tenders received are liable to be rejected and this will be at the sole risk of the Tenderer.
- 3. The tender is liable to be suspended or cancelled at anytime at the discretion of the company without assigning any reason.

In the event of placing orders: -

- a. In tenderer shall return one copy of order signed and sealed as a token of acceptance.
- b. In case of rejection, the equipment should be taken back and replaced at yours risk and cost within 14 days of intimation from HLL.
- c. A certificate confirming that the equipment offered is environment friendly i.e., non-hazardous to the environment is to be enclosed with the Technical bid.

Schedule - H Page 2 of 7

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

TERMS & CONDITIONS

- d. The supplier agrees to supply strictly as per the specification mentioned in the order. HLL reserves the right not to receive the goods beyond the delivery date given in the order.
- e. Liquidated damages for delayed supply:- The parties have to abide by delivery schedule given in the supply order strictly. Penalty for delay @ 0.5% value of the materials per week of delay subject to a maximum of 7.5% of the value of the supply order will be imposed, if accepted by the Company after the stipulated delivery period.

g. Payment Terms :-

- a) 70% of the value of supply shall be paid against supply and acceptance of equipment & accessories.
- b) 20% will be released after successful installation and commissioning
- c) 10% against submission of Performance Bank Guarantee for 10% of contract value. The PBG should be in the form of BG /Demand Draft/ TT in favour of HLL Lifecare Ltd, Trivandrum, India valid for one year from the date of installation and commissioning.

Schedule - H Page 3 of 7

TENDER NO.: PUR/08/R1/PQ/DG SET/2013-14

TERMS & CONDITIONS

c) Payment for incidental charges: The charges for incidental services including supervision, if provided separately in the contract, shall be paid after the said services have been performed to the satisfaction of the purchaser in accordance with the requirements of the contract

WARRANTY

The supplier shall warrant that the goods supplied /WORK COMPLETED under the contract shall have no defect arising from design, materials or workmanship. Period of warranty shall be twelve months from the date of installation and commissioning as certified jointly by the supplier and the Purchaser.

INSURANCE

The goods supplied under the contract, shall be fully insured by the supplier in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery.

DELIVERY/COMPLETION PERIOD

Time being the essence of the Contract, the delivery and completion period stipulated should be strictly adhered to. The Supplier should deliver the equipments as per the Contract within 4 months from the date of award of contract.

Delivery of the goods shall be made by the supplier in accordance with the terms specified by the purchaser in the notification of award.

Schedule - H Page 4 of 7

TENDER NO.: PUR/08/R1/PQ/DG SET/2013-14

TERMS & CONDITIONS

INSPECTION AND TESTS

The purchaser or its representatives shall have the right to inspect the equipment and accessories and/ or to test the equipment to confirm if they match the specifications as per the order. The purchaser shall notify the supplier in writing of the identity of the representatives for the purposes.

The inspections and tests may be conducted on the premises of the supplier or at point of delivery and/or at site. Where conducted on the premises of the supplier, the Supplier should make available all reasonable facilities including tools, instruments, apparatus, equipment, facilities, and also access to drawings and production data, to enable the Purchaser's nominee to carryout such inspection/tests without obligations to the purchaser.

Goods under the Contact shall not be despatched unless they have been finally inspected by the purchaser or inspection waived and despatch specifically authorized in writing.

For imported goods, Purchaser reserves the right for pre-shipment inspection of the equipment by the Purchaser and/or by a third party.

Should any inspected or tested goods fail to conform to the specifications and performance, the purchaser may reject then and the supplier shall either replace the rejected goods or make all alternations necessary to meet specification requirements free of cost to the purchaser, within a period of 15 (fifteen) days of intimating such rejection.

Schedule - H Page 5 of 7

TENDER NO.: PUR/08/R1/PQ/DG SET/2013-14

TERMS & CONDITIONS

The purchaser's right to inspect, test and, where necessary, reject the goods after the good's arrival at site shall in no way be limited or waived by reason of the goods having previously been inspected, tested and passed by purchaser or its representatives prior to the good's dispatch from the place of manufacture.

Notwithstanding any such inspection/tests carried out at Supplier's works, the equipment shall be accepted only after receipt and successful commissioning at the site and the inspection/tests carried out at Supplier's works will not relieve his contractual obligations for conforming to the specifications under the contract.

PACKING

The supplier shall provide such packing of the goods as is required to prevent damage or deterioration during transit to site. The packing shall be sufficient to withstand, without limitation, rough handling during transit and open storage.

TRANSPORTATION

Bidders are required to supply equipments at our factory premises Peroorkada Trivandrum. The freight and Insurance charges are to be indicated in the rate schedule.

Schedule - H

Page 6 of 7

TENDER NO.: PUR/08/R1/PQ/DG SET/2013-14

TERMS & CONDITIONS

INCIDENTAL SERVICES.

As specified in the price schedule, the supplier may be required to provide any or all of the following services:

- a. Performance or supervision of on-site assembly, start-up and successful commissioning,
- b. Supply of tools required for assembly and/or maintenance ,
- c. Training of the purchaser's personnel.
- d. Performance or supervision of maintenance and/or repair of the equipments, for the period of warranty specified in the contract.

SPARES

The supplier shall offer unit prices valid for two years after the warranty period separately for such essential spare parts and accessories which are recommended as necessary for 2 years and maintenance after warranty period. HLL reserves the right, however, to order any of these spares or increase or decrease the quantity as it may finally decide at the rate given in the tender.

The jurisdiction of any dispute, suits and proceedings arising out of this tender shall be only in the court of Thiruvananthapuram, Kerala, India.

Schedule - H Page 7 of 7

TENDER NO.: PUR/08/R1/PQ/DG SET/2013-14

TERMS & CONDITIONS

INDEMNITY CLAUSE:

If the supplier fails to execute the order within the time prescribed for the delivery of goods ordered or violates or infringes the existing rates as agreed to as mentioned in the supply order, the supplier shall and will indemnify the company against all loses or damages whatsoever to be incurred or sustained including the legal cost or expenses incurred by the company by reason of non-delivery of goods at agreed quantity and rate with in the time specified in the supply order. The company will initiate legal action if the supplier fails to execute the supply order as per the schedule in the supply order for the actual loss suffered. Responsiveness of the Bid shall be at the discretion of HLL.

Bid pronounced Non Responsive by HLL shall be summarily rejected. The decision of HLL will be final and no correspondence of this shall be entertained.

We have read and understood the above conditions and agree to abide by the same.

PLACE: DATE: NAME AND SIGNATURE OF THE APPLICANT (WITH OFFICE SEAL)

SCHEDULE - I Page 1 of 1

HLL LIFECARE LIMITED (A Government of India Enterprise) PEROORKADA THIRUVANANTHAPURAM-695 005, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

CERTIFICATE

I / we hereby certify that the information given with this bidding document is correct. If, at any stage, it is found to be incorrect, I / we understand that the contract will be liable to be terminated and action could be taken against me/us by the Company for damages.

SIGNATURE(S) OF BIDDER WITH SEAL

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

HLL LIFECARE LIMITED (A Government of India Enterprise) PEROORKADA THIRUVANANTHAPURAM-695 005, KERALA, INDIA

PRICE BID

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 750KVA-LT DIESEL GENERATOR SET AT PEROORKADA FACTORY, TRIVANDRUM, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

CONTENTS OF PRICE BID FORMS

1. SCHEDULE J - RATE SCHEDULE

SCHEDULE – J Page 1 of 2

HLL LIFECARE LIMITED

(A Government of India Enterprise) PEROORKADA THIRUVANANTHAPURAM-695 005, KERALA, INDIA

TENDER NO. : PUR/08/R1/PQ/DG SET/2013-14

PRICE BID

RATE SCHEDULE FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 750KVA-LT DIESEL GENERATOR SET AT PEROORKADA FACTORY, TRIVANDRUM, KERALA, INDIA

PRICE PARTICULARS	PER UNIT	REMARKS		
	(IN RS.)			
BASIC PRICE				
EXCISE DUTY (% TO BE FURNISHED)				
CESS ON EXCISE DUTY				
CST/VAT (% TO BE FURNISHED)				
FREIGHT				
INSURANCE				
INSTALLATION & COMMISSIONING				
CHARGES				
OTHERS, IF ANY (PLEASE SPECIFY)				
TOTAL				
(Rupees)				

NB: In case of discrepancy between unit price and total price,

the unit price shall prevail

Payment Terms :

SCHEDULE – J Page 2 of 2

MINIMUM TIME REQUIRED TO START THE }
SUPPLY AFTER RECEIPT OF LETTER OF }
INDENT/SUPPLY ORDERS }

TIME REQUIRED FOR INSTALLING, TESTING & COMMISSIONING

VALIDITY:

ONE YEAR

PLACE:NAME AND SIGNATURE OF THE TENDERERDATE :(WITH OFFICE SEAL)