



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MAGEMENT

ENQUIRY		Phone: +91 431 257 79 38	
		Fax : +91 431 252 07 19	
		Email : tvenkat@bheltry.co.in	
		Web : www.bhel.com	
NOTICE INVITING TENDER			
TWO PART BID	Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
Tender to be submitted in two Parts	2621000153	23.12.2010	22.01.2011
<p>You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.</p> <p>Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.</p>			

Item	Description	Quantity
10	Design, Fabrication, Supply, Erection and Commissioning of 20 MT LPG Bullet as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	1 No.

Important points to be taken care during submission of offer

1. Checklist to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
2. All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.
3. Delivery required 6 months from the date of purchase order including the time for pre-despatch inspection clearance by BHEL.
4. The Bidder may visit the BHEL site at Thirumayam / Trichy for LOX installation and storage, piping distribution for assessing the quantum of work involved before quoting.

BHEL's General guidelines / instructions (refer MM/CE/GT/001) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2621000153".

Tenders should reach us before 14:00 hours on the due date
Tenders will be opened at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

Sr.Manager / Capital Equipment / MM

PART A.**QUALIFYING CRITERIA FOR THE SUPPLY, ERECTION & COMMISSIONING OF 20 MT LPG STORAGE FACILITY****SECTION – I : COMPANY PROFILE**

The BIDDER has to provide the details pertaining to each clause in the table given below and wherever necessary additional sheets may be attached (giving clear reference number) to understand the profile of the BIDDER's COMPANY.

S.No.	PARTICULARS	VENDOR's RESPONSE
1.0	Number of Years of Experience of the BIDDER in the field of Design, Manufacture & Supply of LPG Storage Vessels and Commissioning as per the Regulations of Statutory Authorities	
2.0	Details on the Codes/Standards of Equipment Design, Manufacture, erection & Commissioning of Vessels and Evaporators at Client's Works.	
3.0	Details on Manufacturing Facilities available with the BIDDER for : a) Metal Forming Machines b) Heat Treatment Facilities c) Heavy Machining & Grinding d) Vessel Assembly & Testing	
4.0	Details of Quality System (with Stages of Internal Inspection) followed for the Vessel Building and Testing of Capacity	
5.0	Details of Electrical/Electronic Control Panel Design, Manufacturing and Testing Facilities for Vessels and Evaporators	

SECTION – II : QUALIFYING CRITERIA

The BIDDER has to compulsorily meet the following requirements to get qualified for submitting an offer for the LPG Storage & Supply Facility:

[Additional Sheets shall be attached with the OFFER, to provide requisite details]

S.No.	REQUIREMENTS	VENDOR's RESPONSE
6.0	The BIDDER shall have a minimum of TEN Years of Continuous Experience in the Field of Design, Manufacture, Supply, erection and Commissioning of LPG Storage Vessels and Evaporators with Associated Accessories	
7.0	The BIDDER might have supplied, erected & commissioned atleast FIVE numbers of LPG Storage Vessels and Evaporators with Associated Accessories (including Safety Devices) of Capacity 10 ton and above.	
8.0	Performance Certificate in the enclosed FORMAT for a period, not less than one year, from CUSTOMERS and Reference List of Customers with full contact details of CONTACT PERSON, who are the End Users of supply as per Clause No.7.0	
9.0	BHEL reserves the right to verify the information provided by vendor. In case, it is found to be false/ incorrect, the offer shall get rejected.	
10.0	Details on SERVICE-AFTER-SALES Set-Up in India including the Addresses of Agents / Service Centres in India, to be furnished .	

SECTION – III : BID / OFFER FORMATS

The BIDDER has to comply with the following, for accepting the Technical Offer for scrutiny by the Purchaser :

S.No.	REQUIREMENTS	VENDOR's COMPLIANCE
11.0	The BIDDER shall submit the offer in TWO PARTS - Technical [with PART A & PART B] & Commercial and Price Bid.	
12.0	The OFFER shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each Clause. A just 'YES' or 'CONFIRMED' or 'NO-DEVIATION' or 'COMPLIES' or 'ACCEPTED' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	

S.No.	REQUIREMENTS	VENDOR's RESPONSE
13.0	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details of 'Bought-Out-Items' with copies of Product Catalogue (if applicable)	
14.0	The Commercial Offer shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation of the inclusion of all the accessories, auxiliary parts, safety devices, spares, consumables, etc. with the main vessel/equipment, to meet the technical specification requirements.	
15.0	Earlier performance/field experience (including service support) if any, with BHEL for the BIDDER's Equipment, will be a reckoning factor for the technical qualification of the OFFER.	
16.0	<p>The expected delivery period (including the time for Pre-Dispatch Inspection clearance by BHEL) for the LPG Storage Vessels and Evaporators with Associated Accessories & Safety Devices , is not more than SIX Months (which includes time for General Arrangement Drawing approval by BHEL also) from the date of issue of BHEL Purchase Order.</p> <p>The erection & commissioning, including clearance from the local authorities and statutory agencies, shall be completed in a period of EIGHT WEEKS, after the receipt of equipment at site.</p>	

PERFORMANCE CERTIFICATE – [SAMPLE FORMAT]

(On Customer's Letter Head with Additional Sheet – if necessary)

1. Supplier of the Equipment/Vessel :
2. Make & Model of the Equipment : (if applicable)
3. Month & Year of Commissioning :
4. Application for which LPG is used :
5.

a. Equipment Serial Number	:	
b. Capacity of LPG Storage Vessel	:	
c. Size of LPG Storage Vessel	:	
d. Capacity & Rating of Evaporators	:	
e. List of Accessories provided with the Vessel	:	
f. Details of the Safety Devices Procured	:	
6.

Performance of the LPG Storage Facility	:	Satisfactory /
(including safety aspects and availability)		Good /
		Average /
		Not Satisfactory
7. Feedback on "After Sales Service" by the Supplier :
8. Remarks / Reasons for Recommendations to BHEL :

Date:

Signature & Seal of the Authority
Issuing the Performance Certificate

DESIGN, FABRICATION, SUPPLY, ERECTION, COMMISSIONING- 1X20MT LPG STORAGE FACILITY ABOVE THE GROUND LEVEL AT THIRUMAYAM/PUDUKOTTAI (DIST)/TAMIL NADU			
Sl.No	BHEL Specification	Description	Offer by Bidder
1	NAME OF WORK	DESIGN , FABRICATION ,SUPPLY , ERECTION & COMMISSIONING OF 1 X 20 MT LIQUIFIED PETROLEUM GAS STORAGE , VAPOURIZOR, UNLOADING FACILITIES , SAFETY AND FIRE FIGHTING SYSTEM , EMERGENCY SHUTDOWN SYSTEM , Etc WITH MANDATORY REQUIREMENT . ALL CONFORMING TO THE STANDARDS MENTIONED AS PER SATUTORITY AUTHORTIES AGAINST EACH ITEM ON ESTABLISHING FACILITIES	
2	BRIEF DESCRIPTION OF WORK	M/s. BHEL / Tirchy has proposed to set up 1 x 20 MT capacity of LIQUID PETROLEUM GAS STORAGE YARD in the premises of BHEL , at THIRUMAYAM to meet day to day LPG requirement at a pressure of maximum 1.5 kg/sq.cm at user point through new pipeline with pressure regulation valve for a capacity of nearly 0 to 1000 kg per hour with 2 x 500 Kg/ hr of vaporizer, 2 x 5000 kg/ hr unloading compressor/pump with required piping, valves, fittings, gauges, vents, drains and other accessories as per the requirement of statutory authority and for the operational maintenance convenient.	
3	PROJECT LOCATION	BHEL / THIRUMAYAM at PUDUKOTTAI DIST / TAMIL NADU	
4	LPG STORAGE TANK ABOVE GROUND LEVEL		
4.1.1	Storage Capacity / Tank Capacity	1 x 20 MT	
4.1.2	Service	LPG	
4.1.3	Water capacity of tank	To be mentioned by Bidder	
4.1.4	Design Code	To be mentioned by Bidder	
4.1.5	Working Temperature	To be mentioned by Bidder	
4.1.6	Design Pressure	To be mentioned by Bidder	
4.1.7	Design Temperature	To be mentioned by Bidder	
4.1.8	Hydro test Pressure	To be mentioned by Bidder	
4.1.9	Manhole	To be mentioned by Bidder	

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Sl.No	BHEL Specification	Description	Offer by Bidder
4.1.10	Corrosion Allowance	To be mentioned by Bidder	
4.1.11	Radiography	100 % to be done	
4.1.12	Heat Treatment	Complete Vessel Stress Relieving to be carried out	
4.1.13	Joint Efficiency	One	
4.1.14	Inspection Agencies	List of CCOE approved Third party inspection agencies to be mentioned by Bidder	
4.2	CONSTRUCTION OF MATERIALS		
4.2.1	Shell	Specification to be mentioned by Bidder	
4.2.2	Dished Ends / Pad	Specification to be mentioned by Bidder	
4.2.3	Flanges / Couplings	Specification to be mentioned by Bidder	
4.2.4	Pipes	Specification to be mentioned by Bidder	
4.2.5	Studs & Nuts	Specification to be mentioned by Bidder	
4.2.6	Shell Thickness	To be mentioned by Bidder	
4.2.7	Dish Thickness	To be mentioned by Bidder	
4.2.8	shell Diameter	To be mentioned by Bidder	
4.2.9	Overall Length	To be mentioned by Bidder	
4.2.10	Manhole	Details to be mentioned by the Bidder	
5	VAPOURISER		
5.1	Quantity	Two Nos	
5.2	Capacity per One vapourisor	500 Kg/ hr	
5.3	Type	INDIRECT ELECTRICALLY HEATED WATER BATH VAPOURSIER	
5.4	Heater capacity	Around 75 kW	
5.5	Operation mode	The complete system shall be fully automatic	
5.6	Condition of LPG Vapour	Various interlocks to be provided so that the LPG Vapour produced to meet the demand and no liquid can flow downstream of the Vapouriser.	
5.7	Safety System	All required safety system to be mentioned and all electrical components including pump for pumping water and control panels shall be flameproof, certified by CMRS and approved by CCOE, Nagpur.	

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Sl.No	BHEL Specification	Description	Offer by Bidder
5.8	Operating pressure at user point	0.04 to 1.5 kg/cm ²	
5.9	Inlet / Outlet pipe size	To be mentioned by Bidder	
5.10	THE VAPOURISER INCLUDES PIPING, NECESSARY VALVES, PRESSURE CONTROL VALVE, GAS FILTER ASSEMBLY	ALL TYPE OF VALVES LIKE PRESSURE CONTROL VALVE, PRESSURE RELIEF VALVE, SAFETY VALVE, GAS FILTER ASSEMBLY, FLOW METER & OTHER NECESSARY COMPONENTS/INSTRUMENTS SHALL BE MENTIONED SPECIFICALLY WITH MAKE.	
5.2	MATERIAL OF CONSTRUCTION		
5.2.1	Cylindrical tank	IS 2062	
5.2.2	Coil	SA 312 Type SS 304	
5.2.3	Flanges	A105/ANSI B 16.5/CLASS #300	
5.2.4	Dish Ends	WPB 238	
5.2.5	Water bath type	IS 226	
5.2.6	Heaters	Ni. Cr.	
5.2.7	Pipings	SA 312 Type SS 304	
6	LPG UNLOADING / RECOVERY COMPRESSOR / PUMP		
6.1	Capacity	2 Nos x 5000 kg/ hr	
6.2	Type	Non lubricating	
6.3	Make & Model No.	To be specified by the Bidder and acceptable to BHEL	
6.4	Design Pressure	24kg/cm ²	
6.5	Motor	Motor Shall be energy Efficient & Flame proof and power rating to be mentioned by the Bidder	
6.6	Make	Shall be Crompton Greaves / Siemens / ABB / Kirloskar/ Bharat bijilee only	
7	SAFETY FITTINGS / VALVES FOR LPG BULLETS / PIPELINE , ETC	Valves like (a)Safety Relief Valve on tank, (b)Excess Flow Check Valves for liquid and vapour, Vapour balance, Drain and Pressure Gauge etc., (c)Pressure Gauge with Isolation valve (d)Temperature Gauge with Thermocouple (e)Pop Action Valves (f)Fixed Level Gauges (g)And any other valves required to meet the CCOE to be mentioned	

Sl.No	BHEL Specification	Description	Offer by Bidder
7.1	Safety Relief Valves	Specification,quantities,material of construction , make are to be mentioned	
7.2	Excess Flow Check Valve for Liquid Inlet, Outlet, Vapour Outlet.	Specification,quantities,material of construction , make are to be mentioned	
7.3	Excess Flow Check Valve for Vapour Balance.	Specification,quantities,material of construction , make are to be mentioned	
7.4	Excess Flow Check Valve for Drain	Specification,quantities,material of construction , make are to be mentioned	
7.5	Excess Flow Check Valve for P. Gauge	Specification,quantities,material of construction , make are to be mentioned	
7.6	3/8" Pressure Gauge with Isolation valve	Specification,quantities,material of construction , make are to be mentioned	
7.7	Temperature Gauge with Thermocouple	Specification,quantities,material of construction , make are to be mentioned	
7.8	Pop Action Valve	Specification,quantities,material of construction , make are to be mentioned	
7.9	Fixed Level Gauge	Specification,quantities,material of construction , make are to be mentioned	
7.10	Any other valves required to meet the CCOE to be mentioned	Specification,quantities,material of construction , make are to be mentioned	
8	PIPELINE INSIDE LPG YARD FOR LIQUID / VAPOUR		
8.1	Material	ASTM A 106 Gr.B Seamless Pipe for Liquid Line / Vapour line	
8.2	Pipeline sizes	Pipeline sizes for Liquid inlet / outlet, Vapour balance / outlet and Drain line etc., to be mentioned by the Bidder	
9	STRUCTURAL STEEL		
9.1	Comprising of MS Angles, Structural Steel & pipes for entire Inside LPG Yard including fire Fighting system & Fenced Area.	Scope of supplier	
9.2	Bulk Head Type	Structural Steel Fabricated Bulk Head to withstand rigidity and pull away force of the LPG Tank Lorry.	

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Sl.No	BHEL Specification	Description	Offer by Bidder
9.3	Crash Post Type	To protect the unloading area from accidental damages by Tank lorry.	
10	STRAINERS / NON RETURN VALVES	Size , Quantity & Make to be mentioned by the Bidder	
11	PRESSURE REGULATING STATION		
11.1.1	Pressure regulating valve		
11.1.2	Make	Kromshroder/Invensys/Honeywell/Sensus only	
11.1.2	Inlet Pressure	To be mentioned by the Bidder	
11.1.3	Outlet Pressure	0-4 Kg/cm ²	
11.1.4	Flow Rate	0 - 1000 Kg/Hr	
11.2.0	FILTERS	Capacity & specn of Filters to be mentioned by Bidder.	
11.2.1	Make	Kromshroder/Invensys/Honeywell/Asco/Madas only	
11.2.2	End connection	End Connection FE 300#.	
11.3.0	SLAM SHUT OFF	Specn of Slam Shut Off to be mentioned by the Bidder.	
11.3.1	MAKE	Kromshroder/Invensys/Honeywell only	
11.3.2	End connection	FE 300#	
12	FIRE FIGHTING FACILITY		
12.1	Fire Extinguishers	The required type, capacity and quantity to be mentioned by the Bidder to meet CCOE norms	
12.2	Fire Hydrant System	To be Designed as per CCOE Norms and the required items like main ring header, sprinkle nozzles etc., to be mentioned by the Bidder	
13	DECANTING HOSES	The required hoses with Fitting for Liquid and vapour to be mentioned by Bidder	
13.1	Specification		
13.2	Standard	To be mentioned by the Bidder	
13.3	Working Pressure	To be mentioned by the Bidder	
13.4	Burst Pressure	To be mentioned by the Bidder	
14	PIPE MATERIAL FOR FIRE FIGHTING	To be mentioned by the Bidder	

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Sl.No	BHEL Specification	Description	Offer by Bidder
15	HARDWARE ITEMS	Comprising of SORF Flanges ANSI B16.5 CLASS 300 & CLASS#150 (Forged), Bends, Tees, Reducers Seamless Sch 80, C A.F Gaskets various sizes, Nuts & Bolts etc., to be mentioned by the Bidder as required.	
16	PRESSURE GAUGES	Various pressure gauges required including sizes & pressure range to be mentioned by the Bidder	
16.1	Make	Wika/H guru/Liebig/Honeywell only	
17	EARTHING STRIPS	Required for Tanks / Unloading Pump, Vapouriser, Compressor and Copper Jumpers for all Flanges etc., to meet the CCOE / others to be mentioned by the Bidder.	
18	INSTRUMENT CONTROL PANEL		
18.1	Type	Weather proof / Flame proof	
18.2	Make	L&T, Siemens or Equivalent acceptable by BHEL	
18.3	Contactors	L& T/ Siemens	
18.4	Approvals	CMRI	
18.5	Location	Outside LPG Yard ,Near Main Gate.	
18.6	Function	DOL Starter for Pump and Compressor High Level Tripping of Motors High Temperature Indicators for Automatic operation of Sprinklers Overload Relay ROV Controls Emergency Hooter (Industrial) Separate Panel for Leak Detection System with LL/ML/HL Indicators	
19	Time schedule for design, supply, erection, testing & commissioning	Six months from the date of issue of Purchase order	
20	IMPORTANT TECHNICAL ASPECTS TO BE NOTED DOWN BY THE BIDDER		

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Sl.No	BHEL Specification	Description	Offer by Bidder
20.1	Bidder shall be in a position to design all Mechanical ,Electrical & Instrumentation equipment in the Liquefied Petroleum gas storage facilities . The Bidder shall take into consideration of all anchors parts , pipe lines, Excess flow valves, safety valves , isolation valves , regulating valves , line blinds, fittings and other miscellaneous equipment for the system to be in complete respect. The Bidder shall practice the most modern design and technology for the proposed system. The Bidder has to furnish general arrangement drawing with main components inner details such as storage tank , inner technical details including materials, Surface area ,etc.,		
20.2	The Bidder should arrange G A Drawing, Quality plan , P & I diagrams for each work and get approved by BHEL Engineer concerned. All the drawings shall be submitted in 3D form also.		
20.3	The Bidder should arrange for tank foundation obtaining construction approval CCOE/ Nagpur . Selection , Inspection & despatch of material , Inspection / certification under Rule 33, Application and obtaining licences from C C O E / Nagpur , Inspection of Plant by Department of Explosive, Endorsement , Supply of documentation for the plant, Obtaining safety certificate from the competent authorities on completion of installation with in the licensed area , Training of our personnel in operation and maintenance are scope of the Bidder.		
20.4	The Bidder should declare the Experience in the relevant field in the recent past , Financial Turn over , Capacity and the Working Establishment of similar nature.		
21	APPROVAL FOR MANUFACTURING OF LPG BULLET ,VAPOURISOR UNIT & THEIR ACCESSORIES	COPY OF APPROVAL CERTIFICATE ISSUED BY CMRI / CCOE FOR MANUFACTURING OF LPG BULLET ,VAPOURISOR UNIT & THEIR ACCESSORIES TO BE ENCLOSED	
22	DESIGN APPROVAL	Design / Drawing approval for manufacturing & complete installation of LPG bullet & Vapourisor etc, from CCOE / Nagpur & Local CCOE .	

Sl.No	BHEL Specification	Description	Offer by Bidder
23	STATUTORY REQUIREMENT	The Scope of the Tender includes assisting the site selection for Installation of L P G Facility at B H E L , THIRUMAYAM IN PUDUKOTTAI DIST,TAMIL NADU. The Bidder should coordinate and obtain necessary clearance certificates with all Statutory bodies such as Explosives, Factory Inspectorate.etc., Charges on this account if any shall be indicated in the Price Bid separately.	
24	CODE OF CONSTRUCTION	The Bidder shall constructs strictly in accordance with the following codes of practice.	
24.1	Static and Mobile Pressure vessels Rules(Unfired) -1981 with latest amendments if any.		
24.2	IS - 2825 -1969 for design /fabrication / Inspection of L P G Storage bullet.		
24.3	IS - 2148 for all electrical motors , starter , on-off control system etc.,		
24.4	Directives of CCOE / Nagpur to be adhered.		
24.5	All pipe lines and fittings to confirm to IS 6044		
24.6	The quality of gas is confirm to IS 4576/1999.		
24.7	Minimum Nett Calorific Value of quoted L P G with +/- % in ref to any standards.		
25	QUALITY PLAN		
25.1	The Bidder should arrange Quality plan for each work and get approved by Engineer concern.		
25.2	The Bidder shall follow relevant ASME section for Liquid Oxygen Storage System and Liquid Oxygen		
25.4	The Bidder should guarantee full capacity of Liquid Oxygen in the filled condition.		
25.4	The Bidder should furnish the maximum permissible evaporation losses , Liquid transfer losses of the		
26	ERECTION & COMMISSIONING		
26.1	The Erection & Commissioning and handing over of the system is in the scope of Bidder.The supplier		
26.2	The work shall be executed in a professional manner adopting safe working practices. All Statutory		
26.3	All Statutory labour laws like PF , ESI etc., in respect of labour shall be strictly adhered to.		
26.4	The Bidder may visit the BHEL Site at Thirumayam / Trichy for LOX installation and storage, piping		

Sl.No	BHEL Specification	Description	Offer by Bidder
27	CIVIL WORK	All civil work will be carried out by BHEL for the entire Project and the required drawings details will have to be furnished by the Supplier to BHEL along with the offer or within two weeks of Purchase Order. The civil drawing should indicate the dynamic loading or foundation details of the vessel foundation drawing. If any special requirement in the foundation is to be considered, you may please indicate the same. 4 Set of G A drawing with foundation details are needed.	
28	SAFE CUSTODY & PRESERVATION OF COMPONENTS		
28.1	The safe custody of storage vessel, Evaporator, Regulation system till commissioned and handed over will also be under the scope of the contractor		
28.2	It is the responsibility of the supplier to apply touch up painting on all equipment before erection at his cost.		
28.3	Preservation of all equipment at all stages of handling, transporting to site of work or Pre Assy Yard, Pre - Assembly Erection, Testing, Commissioning, and till the unit is handed over to BHEL for regular operation.		
29	GENERAL CONDITIONS	The intent of this specification is to provide services for executing the projects according to most modern and proven techniques and codes. The omission of specific reference to any method, and equipment or materials necessary for the proper and efficient services towards installation shall not relieve the contractor of the responsibility of providing such services / facilities to complete the work or portion of work awarded to the Supplier. The quoted rate shall be deemed to be inclusive of all such contingencies.	
30	PAINTING	Painting of the entire system with two Coats of Red Oxide and two Coats of Epoxy paint as per colour code.	
31	VENDOR'S BRIEF SCOPE OF SUPPLY		

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Sl.No	BHEL Specification	Description	Offer by Bidder
31.1	Detailed scope of supply to be provided by Bidder . I.e itemwise/component wise including individual item capacity,material , quantity & make etc to be furnished along with offer.		
31.2	Supply, Installation and Commissioning of the entire system (as mentioned above specification) as per CCOE Norms and to Customer's Satisfaction.		
31.3	Scope restricted to Inside LPG Yard including Fire fighting system & Fenced Area.		
31.4	Proving and Laying Cables (Flame Proof) inside LPG Yard as per the details provided.		
31.5	Providing all Technical Help required related to LPG Installation.		
31.6	Providing all related Drawings like P & I (Process & Instrumentation) and Layout Drawing, Complete Civil Drawings.		
31.7	Complete Initial Drawings Approval from CCOE (Chief Controller of explosives – Nagpur).		
31.8	Complete 3rd Party Inspection for acquiring Rule for fabrication & installation of entire LPG facilities..		
31.9	Obtaining Final License from CCOE – Nagpur towards the Installation.		
31.10	Endorsement of the CCOE License from Local CCOE office.		
31.11	Training of operation & maintenance staff of LPG facilities.		
31.12	Providing complete Guarantee Certificates / Product Manuals and Tank History file for project in 4 sets. (1 Original + 3 Xerox copy)		
31.13	Required consumables like cutting gases, welding electrodes for installation purposes .		
31.14	The crane facility required for unloading & installation of LPG SYSTEM at site		
31.15	From single point power source (Panel board) to all concerned Electrical Equipments like Pump ,		
31.16	Complete Electrical equipments like FLP Glands, DOL Starters etc.		
31.17	Bidders shall deploy complete set of Tools & Plant for Erection, Testing Commissioning, and Hand over of the liquid LPG storage facility installation for regular operation.		
32	BHEL SCOPE OF SUPPLY		
32.1	Complete Civil work involved inside LPG Yard which includes Civil Pedetals for Tanks, Pump & Compressor Shed, Vapouriser Shed, Control Room, Unloading Gantry, Fencing, Gates, Instrcutions and Sign Boards etc.		

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Sl.No	BHEL Specification	Description	Offer by Bidder
32.2		Providing water tank dedicated to LPG Yard for Fire Fighting. Water Storage Calculation to be provided by the successful vendor.	
32.3		Providing water line upto fencing of LPG Yard at 3 Kg/cm ² pressure.	
32.4		Providing single point Power source (Panel Board) to all concerned Electrical Equipments like Pump , Compressor , Vapourisers etc.	
32.5		Explosive Fees towards Drawing Approval and towards Final License Fees for 3 years as applicable.	
32.6		Local NOC from District Magistrate from the date of receipt of Drawings Approval.	
32.7		Complete Electrical equipments like FLP Glands, DOL Starters etc.	

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Sl.No	BHEL Specification	Description	Offer by Bidder
33	PRE-DISPATCH INSPECTION AT SUPPLIERS WORKS	LPG BULLET ,VAPOURISOR UNIT & THEIR ACCESSORIES Shall be offered for Pre-dispatch inspection by BHEL Engineers at supplier's works	
34	PROVE OUT AND ACCEPTANCE	LPG bullet & their facilities establishment completion will mean after obtain the necessary inspection completion, statutory approval and physical demonstration of all systems to the satisfaction of BHEL engineers for the safe operation of the system. A plant will be operated along with auxillary equipments such as filling of LPG to the bullet, lining of LPG through vapouriser, testing of sprinkler fire fighting system, etc. as per the normal required parameters to satisfy the design condition.	
35	WARRANTY	Warranty for products against defetive materials and workmanship for a period of 12 months from the date of commissioning or 18 months from the date of despatch whichever is earlier	
36	SPECIFIC NOTE	Bidders must submit valid CCOE certificate copy for manufacturing of LPG bullet, vapouriser unit & other facilities along with their offer, failing which offer will be liable for rejection.	