

### Bid Document

Bid Details	
Bid End Date/Time	24-07-2020 17:00:00
Bid Opening Date/Time	24-07-2020 17:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Ministry Of Petroleum And Natural Gas
Department Name	Bharat Petroleum Corporation Ltd
Organisation Name	Bharat Petroleum Corporation Ltd
Office Name	West
Total Quantity	11
Item Category	solar water heating system
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Document required from seller	Past Performance *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Past Performance	40 %
Bid to RA enabled	No
Inspection Required	No

### EMD Detail

Required	No
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### ePBG Detail

Required	No
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### Splitting

Bid splitting not applied.

1. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 40% of bid quantity, in at least one of the last three years before the bid opening date to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts (proving supply of cumulative order quantity in any one year) to be submitted along with bid in support of quantity supplied in the relevant year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

## Solar Water Heating System ( 11 pieces )

### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
GENERIC	Conformity to standards for Solar water Heating System -Code for Acceptance	IS:12976:1990 with latest amendment	*
	<b>BIS Approved</b>	No	No
	If Yes , Mention CM/L No. otherwise write NA	-	*
	Model Number of Solar Water Heater System	-	*
	<b>Solar water Heating System Compatibility with Heat Exchange</b>	Solar water Heating System with out Heat Exchanger	Solar water Heating System with out Heat Exchanger
	Region	Type 2 Warm (Areas where ambient temp. is moderate and do not normally below 5 Deg. C	*
	<b>Rated Capacity in Litres per Day (LPD)</b>	500	500
	<b>Warranty (Years)</b>	2 Years	2 Years
CONSTRUCTIONAL	<b>Aperture area of collector , Sq. Meteres (Sq Meter)</b>	4.0	4.0
	<b>Electrical Heater ( Back up ) Capacity (kw)</b>	2	2
	<b>Capacity of Make up tank( SWHS with Heat Exchanger only ) (Ltrs)</b>	NA	NA

Solar Flat Plate shall be BIS marked and as per IS :12933/2003 with amendment 1 to 3	Yes	*
<b>Type of Cover Plate conforming to IS 12933/2003</b>	Toughened Glass and Anticorrosive Solar Glass with minimum thickness 3.2 mm	Toughened Glass and Anticorrosive Solar Glass with minimum thickness 3.2 mm
Solar Transmittance for cover plate at normal Incidence (%)	82	*
<b>Material for Collector Box</b>	CRCA	CRCA
Numbers of collectors	-	*
Minimum Channel Section Thickness for sides ( For Al based)	0 for CRCA	*
Minimum Thickness of Sheet for Bottom ( For Al based)	0 for CRCA	*
Minimum Thickness of Sheet used as Support for Glass retaining ( For Al based)	0 for CRCA	*
Thickness of Sheet for entire body	0 for CRCA	*
CRCA Material Thickness	> / = 0.91 mm for CRCA	*
Riser and Header assembly designed for working pressure	Riser and Header assembly designed for working pressure 24.5 k pa tested for leakage at a minimum hydraulic pressure of 490 K pa	*
Number of absorber sheets per collector	-	*
Numbers of Header Tubes	-	*
Numbers of Riser Tubes	-	*
Diameter of Header Tube (mm)	> / = 24.5 mm	*
Diameter of riser tube (in mm)	> / = 11.5 mm	*
Thickness of Header Tube (mm)	> / = 0.71	*
Thickness of Riser Tube (mm)	> / = 0.56 mm	*

Material of Riser /Header for Absorber	Copper Only	*
Distanace Between Risers from center to center (mm)	> / = 120 (mm)	*
<b>Material of sheet for absorber</b>	Copper	Copper
Collector Box Insulation	Back and sides	*
Thermal Resistance of Insulation in Square Degree for Back Face	>/=0.96 W/Km	*
Thermal Resistance of Insulation in Square Degree for Side Face	>/=0.47 W/Km	*
Gasket and Grommets shall confirm to IS 12933/2003 with latest amdt	Yes	*
<b>Material for Hot water storage Tank</b>	any other Material with anticorrosive coating for hard water with chlroine components	any other Material with anticorrosive coating for hard water with chlroine components
Name the Material if choose others	-	*
Non Pressure Type Hot water Storage Tank	Yes	*
Position of Hot water tank	Horizontal	*
Thickness of sheet of Hot water tank (mm)	-	*
Hot water Tank Insulation Density ( High density PUF insulation for 32 kg/ meter cube or higher density (mm)	>/=40	*
Hot water Welding	TIG	*
Coating Material for Hot water tank	Polyster Epoxy Plus Balck Epoxy based Paint	*
Thickness of Coating (micron)	-	*
Tank stand Material	Mild Steel	*
Size of Tank Stand (L x W x H ) Must be Greater Than 38 x 38 x 4 (mm3)	Yes	*

Type of Heat Exchanger	cage Type	*
<b>Material for Heat Exchanger</b>	Copper	Copper
Thickness of tube of heat Exchanger , Minimum 22 SWG	Yes	*
Heat Transfer Rate for heat Exchanger	Must be greater than 0.24 sq meter per 100 LPD capacity	*
<b>Numbers of Electrical Heaters ( Back Up Type ) provided</b>	2	2
Collector Stand Material	Mild steel	*
Size of Collector Tank Stand (L x W x H ) Must be Greater Than 38 x38 x 4 (mm3)	Yes	*
System Interconnecting Pipes material	Other Material	*
if other mention the Material for interconnecting pipes	-	*
Size of interconnecting Pipes (mm)	-	*
Tank test Pressure (bar)	1	*
System Working Pressure (Bar)	0.5	*
Inlet and Outlet Valve	Yes	*
Temp Gauge( for Hot Water )	Yes	*
Gun Metal Strainer ( for Cold Water )	Yes	*
Water Meter	Yes	*
Gasket for Flanges	3 mm thick gasket of neoprene	*
Electrical Back up Control panel	Yes	*
Make of Control Panel	L&T	*
if others , mention the make of Control Panel	-	*
Weight of solar water heater system (kg)	250	*

CERTIFICATIONS	Availability of Test Report as per IS : 6893-6 (1985) used for purchase specification for Machine Tools , Part 6 Bench /Pillar type Drill Machine with latest amendment from Central Govt./NABL/ILAC accredited lab to prove conformity to specification	yes	*
	Test Report No.	-	*
	Test Report Date	-	*
	Name of the Lab	-	*
	Address of the Lab	-	*
	Availability of Schematic Drawing	Yes	*
	Instruction Manual for installation , Repair and maintenance	Yes	*

\* Specifications highlighted in bold are the Golden Parameters.

\* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.

### Additional Specification Documents

#### Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Jitendra Kumar Tiwary	423104, Manmad Installation, Manmad - Nandgaon Road, Manmad-423104	11	30

### Bid Specific Additional Terms and Conditions

1. Timely Servicing / rectification of defects during warranty period: After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within 7 days time limit. If the Seller fails to complete service / rectification with defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG). Cumulative Penalty cannot exceed more than 10% of the total contract value after which the Buyer shall have the right to get the service / rectification done from alternate sources at the risk and cost of the Seller besides forfeiture of PBG. Seller shall be liable to reimburse the cost of such service / rectification to the Buyer.

2. Over and above the normal Warranty terms as per GeM GTC, the successful bidder / OEM shall have to provide Comprehensive Warranty during the entire Standard warranty period as per contract. : The comprehensive warranty shall be covering the following scope Solar Water Heater complete system (Upload an undertaking with the bid confirming compliance by the bidder if Bidder is taking onus of this compliance. In case OEM is taking onus of this compliance, OEM undertaking is to be uploaded along with Bidder undertaking)
3. Bidder / OEM has to give an undertaking that after expiry of warranty period, it will provide AMC Service for next 5 years for the offered products at the rate not more than 3 % of contract price per annum. Buyer reserves the right to enter into an AMC agreement ( covering preventive maintenance and servicing)with the Successful Bidder / OEM after expiry of the Warranty period at rate as mentioned above and the payment for the AMC charges would be made Quarterly after rendering of the AMC Services of the relevant AMC period. Performance Security of the successful bidder shall be forfeited if it fails to accept the AMC contract when called upon by the buyer. The original Performance Security of contract will be returned only after submission and verification of AMC Performance Security for 5% of total AMC value valid up to AMC period plus 2 months (if there is no other claim). (Undertaking of acceptance to be uploaded with bid).
4. Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)
5. After award of contract – Successful Bidder shall have to get Detailed Design Drawings approved from buyer before starting fabrication. Successful Bidder shall submit Detailed Design Drawings for Buyer's approval, within 10 days of award of contract. Buyer shall, either approve the drawings or will provide complete list of modification required in the drawings within 7 days. Seller shall be required to ensure supply as per approved Drawings with modifications as communicated by Buyer. If there is delay from buyer side in approval of drawing– the delivery period shall be refixed without LD for the period of delay in approval of Drawing.

[This Bid is also governed by the General Terms and Conditions](#)

**---Thank You---**