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Event ID	:	41547	RFQ/NIT/Enquiry no.	:	E/PG/NB2/E-6393/2019
Description	:	Open (Global) Tender for Gypsum Dewatering System for 3x660 MW NPGCPL NABINAGAR STPP FGD PKG.			

Total lump sum firm price inclusive of all prevailing taxes, duties and other levies for SUPPLY PART, SERVICE PART & MANDATORY SPARES comprising of design (i.e.preparation and submission of drawing/ documents including “As Built” drawings and O&M manuals), engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor’s works,Charges of BHEL/ Customer nominated inspection agency (if equipment sourced from outside India), painting, maintenance tools & tackles, first fill & top-up of lubricants & consumables, mandatory spares alongwith spares for erection, startup and commissioning as required, forwarding, proper packing, shipment and delivery at site, Supervision of Erection & Commissioning, trial run at site and carrying out performance guarantee tests at site, training of customer/client O&M staff, training at manufacturer's works & final handing over to end customer in flawless condition for project and package specified above complete with all accessories for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.

PRICE BID - MAIN SUPPLY

Total Lumpsum prices inclusive of all prevailing taxes, duties and other levies for SUPPLY part comprising of design (i.e. preparation and submission of drawing /documents including “As Built” drawings and O&M manuals), engineering, manufacture, fabrication, assembly, inspection / testing at vendor's & sub-vendor’s works, Charges of BHEL/ Customer nominated inspection agency (if equipment sourced from outside India), painting, maintenance tools & tackles, first fill & top-up of lubricants & consumables, alongwith spares for erection, startup and commissioning as required, forwarding, proper packing, shipment and delivery at site and package specified above complete with all accessories for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.

Sr No.	ITEM DESCRIPTION	HSN CODE	UOM	QUANTITY	UNIT EX-WORKS PRICE (DULY PACKED) (INR)	TOTAL EX-WORKS PRICE (DULY PACKED) (INR)	Freight %	Freight Amount (INR)	Total PRICE (EX-WORKS + FREIGHT) (INR)	GST Type	GST RATE in %	GST AMOUNT (INR)	Total FOR site Price (INR)	Total FOR site Price in words (INR)
Long text | Other | Show	Long text | Item name | Show	All numbers | HSN Code | Show	Small text | Unit of measurement | Show	All numbers | Quantity | Show	Other | Show	All numbers | Total rate | Show	Other | Show	All numbers | Other | Show	All numbers | Other | Show	Other | Show	Other | Show	All numbers | Other | Show	All numbers | Other | Show	Long text | Other | Show

1	Primary hydro cyclone comsprising of hydrocyclone clusters, anchor bolts, nuts and washers, flanges for inlet and overflow, a variety size of vortex finders for all the hydro cyclone, accessory piping within the skid to make the system complete.	84211999	SET	2	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
2	Secondary hydro cyclone comprising of hydrocyclone clusters, anchor bolts, nuts and washers, companion flanges for inlet and overflow, variety size of vortex finders for all the hydro cyclone & accessory piping within the skid to make the system complete.	84211999	SET	2	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
3	Vacuum belt filters complete with accessories including discharge chute, and driving motors (IE3) with VFD & inverter panel.	84211999	NOS.	2	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
4	Vacuum receivers with anchor bolts, nuts and washers.	84211999	NOS.	2	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
5	Vacuum pumps with drive (IE3 motor) along with all connecting bolts/ nuts/ washers for installation, required instruments and safety device (as required).	84211999	NOS.	2	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
6	Vent fan including enclosure and its arrangement.	84211999	NOS.	2	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
7	Complete arrangement for cloth and cake washing (excluding	84211999	LOT	1	To be	Auto	To be	Auto	Auto	To be	To be	Auto	Auto	Auto

	tanks & their Instruments), pumps with motors (IE3), associated piping, valves, spray nozzles & accessories				filled by bidder (+no. with (.))		filled by bidder (+no. with (.))			filled by bidder (Combo Box)	filled by bidder (+no. with (.))			
8	Complete arrangement of Filtrate extraction pumps with motors (IE3), suction and discharge expansion joint, associated piping upto filtrate extraction tanks, valves, instrumentation etc. to make system complete	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
9	Complete arrangement of Vacuum pump seal water sump pump with motors (IE3), associated piping upto Cake wash tanks, valves, instrumentation etc. to make system complete.	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
10.a	Complete interconnected piping (slurry, air and water pipes) along with valves, rubber lining (wherever aplicable), supports, gaskets, fasteners and accessories which is integral to Gypsum dewatering system [Slurry piping from Primary hydro cyclones underflow to Vacuum Belt Filters]	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
10.b	Complete interconnected piping (slurry, air and water pipes) along with valves, rubber lining (wherever aplicable), supports, gaskets, fasteners and accessories which is integral to Gypsum dewatering system [Filtrate piping from Vacuum belt filters to Vacuum receivers and further up to the extraction pumps discharge]	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
10.c	Complete interconnected piping (slurry, air and water pipes) along with valves, rubber lining (wherever aplicable), supports, gaskets, fasteners and accessories which is integral to Gypsum dewatering system [Air piping from vacuum receivers to vacuum pumps to atmosphere	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
10.d	Complete interconnected piping (slurry, air and water pipes) along with valves, rubber lining (wherever aplicable), supports,	84211999	LOT	1	To be filled by	Auto	To be filled	Auto	Auto	To be filled	To be filled	Auto	Auto	Auto

	gaskets, fasteners and accessories which is integral to Gypsum dewatering system [Vacuum pumps - seal water / drain water pipes to/ from wash tanks]				bidder (+no. with (.))		by bidder (+no. with (.))			by bidder (Combo Box)	by bidder (+no. with (.))			
10.e	Complete interconnected piping (slurry, air and water pipes) along with valves, rubber lining (wherever aplicable), supports, gaskets, fasteners and accessories which is integral to Gypsum dewatering system [Process water piping from TP outside building to wash tanks]	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
10.f	Complete interconnected piping (slurry, air and water pipes) along with valves, rubber lining (wherever aplicable), supports, gaskets, fasteners and accessories which is integral to Gypsum dewatering system[Instrument air piping from TP outside building upto equipment related to the system]	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
11	Complete instruments/valves associated with equipment and integral piping as defined at sr. no. 10.a to 10.f above for Gypsum Dewatering System	84211999	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
12	Coupling with guards, wherever applicable	84211999	SET	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
13	Expansion Joints at suction and discharge of each pump/other equipment, as applicable	84211999	SET	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
								Grand Total	Auto				Auto	

NOTE:
1 Bidder to note that above BOQ for this tender has to be read in conjunction with tender specification. Any item, if not mentioned in above BOQ but indicated in tender specification and required for completion of the system shall deemed to be included in above price.
2 Referring to Clause no. 2.1.1.9 (ii) sheet 4 & 5 of 19, Sub-section-C1, Section-I (Page 24 & 25 of 522 of the Specification); Interconnected piping (slurry, air and water pipes) along with instruments, valves, rubber lining (wherever applicable), supports, gaskets, fasteners and accessories which is non integral to Gypsum dewatering system are limited to engineering only and supply shall be made by BHEL. Engineering includes layout & routing of pipes, preparation of isometric drawing and BOQ.

Mandatory : Yes

Created formula(s)

Sr. No.	Formula for	Formula
1	TOTAL EX- WORKS PRICE (DULY PACKED) (INR)	QUANTITY * UNIT EX - WORKS PRICE (DULY PACKED) (INR)
2	Freight Amount (INR)	TOTAL EX - WORKS PRICE (DULY PACKED) (INR) * Freight % / 100
3	Total PRICE (EX-WORKS + FREIGHT) (INR)	TOTAL EX - WORKS PRICE (DULY PACKED) (INR) + Freight Amount (INR)
4	GST AMOUNT (INR)	Total PRICE (EX - WORKS + FREIGHT) (INR) * GST RATE in % / 100
5	Total FOR site Price (INR)	Total PRICE (EX - WORKS + FREIGHT) (INR) + GST AMOUNT (INR)
6	Total FOR site Price in words (INR)	Total FOR site Price (INR)
7	Total PRICE (EX-WORKS + FREIGHT) (INR)	TOTAL (Total PRICE (EX - WORKS + FREIGHT) (INR))
8	Total FOR site Price (INR)	TOTAL (Total FOR site Price (INR))

PRICE BID-Mandatory spares

Total lumpsum firm price inclusive of all prevailing taxes, duties and other levies for Mandatory spares comprising of manufacture, fabrication, assembly, inspection / testing (as applicable) at vendor's & sub-vendor’s works, painting, forwarding, proper packing, shipment, delivery at site & guarantee as per tender technical specification above, amendment & agreements till placement of order

S. NO.	ITEM	ITEM DESCRIPTION-2	ITEM DESCRIPTION-3	HSN code	QUANTITY	TOTAL EX-WORKS PRICE	Freight	Freight Amount	Total PRICE (EX-WORKS	GST TYPE	GST in	GST AMOUNT	TOTAL FOR	Total FOR site Price

	DESCRIPTION-1					(DULY PACKED) (INR)	%	(INR)	+ FREIGHT) (INR)		%	(INR)	SITE PRICE (INR)	in words (INR)
Long text | Other | Show	Long text | Item name | Show	Long text | Other | Show	Long text | Other | Show	All numbers | HSN Code | Show	Long text | Quantity | Show	Unit rate | Show	Other | Show	+no. with (.) | Other | Show	+no. with (.) | Total rate | Show	GST Applicable | Show	Other | Show	+no. with (.) | Other | Show	+no. with (.) | Other | Show	Long text | Other | Show
I.1(a)	MECHANICAL	Hydro-cyclones (Gypsum Primary Dewatering, Secondary Waste Water and any other Hydrocyclone)	Hydro-cyclone Isolation Valve	84219900	10% of each type OR 1 no. whichever is higher	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.1(b)	MECHANICAL	Hydro-cyclones (Gypsum Primary Dewatering, Secondary Waste Water and any other Hydrocyclone)	Hydro-Cyclone	84219900	10% of each type OR 1 no. whichever is higher	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.1(c)	MECHANICAL	Hydro-cyclones (Gypsum Primary Dewatering, Secondary Waste Water and any other Hydrocyclone)	Hydro-Cyclone rubber lining	84219900	10% of each type OR 1 no. whichever is higher	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.1(d)	MECHANICAL	Hydro-cyclones (Gypsum Primary Dewatering, Secondary Waste Water and any other Hydrocyclone)	Vortex finder & Apex inserts	84219900	10% of each type OR 1 no. whichever is higher	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.2(a)	MECHANICAL	Vacuum Belt Filter	Filter Cloth	84219900	6 sets	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto

I.2(b)	MECHANICAL	Vacuum Belt Filter	Belt	84219900	2 sets	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.2(c)	MECHANICAL	Vacuum Belt Filter	Vacuum Box Seals	84219900	3 sets	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.2(d)	MECHANICAL	Vacuum Belt Filter	Drive Motor	84219900	1 no.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.3.1(a)	MECHANICAL	Vacuum Pumps	Pump Impeller Assembly	84219900	1 no.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.3.1(b)	MECHANICAL	Vacuum Pumps	Pump Bearing	84219900	1 set	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.3.1(c)	MECHANICAL	Vacuum Pumps	Seals	84219900	1 set	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto

I.3.1(d)	MECHANICAL	Vacuum Pumps	Motor	84219900	1 no.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.3.1(e)	MECHANICAL	Vacuum Pumps	V-belt	84219900	2 no.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.3.2(a)	MECHANICAL	Vacuum Breaker Valves	Valve Assembly	84219900	1 no.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.3.2(b)	MECHANICAL	Vacuum Breaker Valves	Actuator	84219900	1 no.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.4(a)	MECHANICAL	Slurry Pumps	Impeller Assembly	84219900	6 no. of each type and size	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.4(b)	MECHANICAL	Slurry Pumps	Complete Casing	84219900	2 no. of each type and size	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.4(c)	MECHANICAL	Slurry Pumps	Casing Liners (where replaceable liners	84219900	2 set*	To be	To be	Auto	Auto	To be	To be	Auto	Auto	Auto

			are provided)			filled by bidder (+no. with (.))	filled by bidder (+no. with (.))			filled by bidder (Combo Box)	filled by bidder (+no. with (.))			
I.4(d)	MECHANICAL	Slurry Pumps	Seals	84219900	6 set of each type and size	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.4(e)	MECHANICAL	Slurry Pumps	Bearings	84219900	4 no. of each type and size	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.4(f)	MECHANICAL	Slurry Pumps	Motor	84219900	1 no. of each type and size	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.4(g)	MECHANICAL	Slurry Pumps	Gear Box	84219900	1 no. of each type and size of pump	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.4(h)	MECHANICAL	Slurry Pumps	Motor-Pump Coupling	84219900	1 no. of each type	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.5	MECHANICAL	NA	Slurry Valves	84219900	6 nos. of each type	To be filled by	To be filled	Auto	Auto	To be filled by	To be filled	Auto	Auto	Auto

					and size	bidder (+no. with (.))	by bidder (+no. with (.))			bidder (Combo Box)	by bidder (+no. with (.))			
I.6	MECHANICAL	NA	Slurry Line Bends	84219900	6 nos. of each type and size	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.7(a)	MECHANICAL	Sump Pumps	Complete Impeller Assembly	84219900	1 no. of each type	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.7(b)	MECHANICAL	Sump Pumps	Casing Liners	84219900	1 set* of each type	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.7(c)	MECHANICAL	Sump Pumps	Bearing	84219900	3 set	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.7(d)	MECHANICAL	Sump Pumps	Motor	84219900	4 no. of each type	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.7(e)	MECHANICAL	Sump Pumps	Pump discharge valve assembly	84219900	1 no. of each type	To be filled by bidder	To be filled by	Auto	Auto	To be filled by bidder	To be filled by	Auto	Auto	Auto

						(+no. with (.))	bidder (+no. with (.))			(Combo Box)	bidder (+no. with (.))			
I.7(f)	MECHANICAL	Sump Pumps	V-belt	84219900	2 Set	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.8(a)	MECHANICAL	Horizontal Centrifugal Pumps	Complete Impeller Assembly	84219900	2 nos. of each type	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.8(b)	MECHANICAL	Horizontal Centrifugal Pumps	Casing Liners	84219900	2 set* of each type	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.8(c)	MECHANICAL	Horizontal Centrifugal Pumps	Bearing	84219900	2 set*	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.8(d)	MECHANICAL	Horizontal Centrifugal Pumps	Motor	84219900	1 no. of each type	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
I.8(e)	MECHANICAL	Horizontal Centrifugal Pumps	Pump discharge valve assembly	84219900	2 nos. of each type	To be filled by	To be filled by bidder	Auto	Auto	To be filled by	To be filled by bidder	Auto	Auto	Auto

						bidder (+no. with (.))	(+no. with (.))			bidder (Combo Box)	(+no. with (.))			
I.8(f)	MECHANICAL	Horizontal Centrifugal Pumps	V-belt	84219900	3 Set	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.01.01	MEASURING INSTRUMENTS	MEASURING INSTRUMENTS	(i) Transmitters of all types and model no. (for measurement of pressure, differential pressure, flow, level, temp, etc.). This shall include magnetic/ electromagnetic flow meter, mass flow meter also.	84219900	10% or 1 no. of each type and model, whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.01.02	MEASURING INSTRUMENTS	MEASURING INSTRUMENTS	Temp Elements along with thermo well (except winding temp elements of motor)	84219900	10% or 2 no. of each type, model & length, whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.01.03	MEASURING INSTRUMENTS	MEASURING INSTRUMENTS	(i) Process Actuated Switches (Pressure, Differential pressure, flow, level, temp) (ii) Limit switches (for pneumatic and manual valves)	84219900	10% or 2 no. of each type and model, whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.01.04	MEASURING INSTRUMENTS	MEASURING INSTRUMENTS	Local Gauges for Pressure, Differential pressure, flow, level,temp	84219900	5% or 1 no. of each type, model and range, whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.02.01	MEASURING INSTRUMENTS	OTHER RELATED CONTROL AND INSTRUMENTATION SYSTEMS / EQUIPMENTS	Set of gaskets/O-rings/ seals	84219900	200% of each type, model, rating and size	To be filled by bidder (+no. with (.))	To be filled by bidder (+no.	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no.	Auto	Auto	Auto

							with (.))				with (.))			
II.1.02.02	MEASURING INSTRUMENTS	OTHER RELATED CONTROL AND INSTRUMENTATION SYSTEMS / EQUIPMENTS	Filters, light source, sensor, detector, etc.	84219900	100% of each type, model and rating	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.02.03	MEASURING INSTRUMENTS	OTHER RELATED CONTROL AND INSTRUMENTATION SYSTEMS / EQUIPMENTS	Complete Probe with shield assembly (Not applicable for In situ-path)	84219900	1 no. of each type and model	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.02.04	MEASURING INSTRUMENTS	OTHER RELATED CONTROL AND INSTRUMENTATION SYSTEMS / EQUIPMENTS	Electronic card assembly/ PCBs, moisture/condensate monitor,power supply modules	84219900	10% of each type, model and rating	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.03.01	MEASURING INSTRUMENTS	PROCESS CONNECTION PIPING (For Impulse Piping / Tubing and Air Supply Piping as Applicable)	Valves of all types and models	84219900	10% or 1 no. of each type, class, size and model whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.03.02	MEASURING INSTRUMENTS	PROCESS CONNECTION PIPING (For Impulse Piping / Tubing and Air Supply Piping as Applicable)	2 way, 3way, 5way valve manifolds	84219900	10% or 1 no. of each type, class, size and model whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.03.03	MEASURING INSTRUMENTS	PROCESS CONNECTION PIPING (For Impulse Piping / Tubing and Air Supply Piping as Applicable)	Fittings	84219900	10% or 1 packet of each type, class, size	To be filled by bidder (+no. with (.))	To be filled by bidder	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder	Auto	Auto	Auto

					and model whichever is more.		(+no. with (.))				(+no. with (.))			
II.1.03.04	MEASURING INSTRUMENTS	PROCESS CONNECTION PIPING (For Impulse Piping / Tubing and Air Supply Piping as Applicable)	Purge meters	84219900	5% of each model or 1 no. whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.03.05	MEASURING INSTRUMENTS	PROCESS CONNECTION PIPING (For Impulse Piping / Tubing and Air Supply Piping as Applicable)	Filter regulators	84219900	20% of each model or 2 nos. whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.04.01	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Pneumatic and electro-hydraulic actuator assembly	84219900	10% or 1 no. of each type, model and rating, whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.04.02	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Valve trim (including cage, plug, stem, seat rings, guide bushings etc.)	84219900	1 set for each type of control valve.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.04.03	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Diaphragms, O’ rings, seals etc. of all types make etc.	84219900	1 set for each type and rating	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.04.04	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Pressure Gauges of all types, make, rating etc.	84219900	10% or 2 nos. of each type whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no.	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no.	Auto	Auto	Auto

							with (.))				with (.))			
II.1.04.05	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Solenoid valves (if applicable)	84219900	10% or 2 nos. of each type whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.04.06	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Positioner units (complete unit)& accessories (link assembly)	84219900	10% or 1 no. of each type whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.04.07	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Pneumatic air-filter/Regulator of each type, make rating etc.	84219900	10% or 2 Nos., whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.04.08	MEASURING INSTRUMENTS	CONTROL VALVES, ACTUATORS & ACCESSORIES	Air lock relays	84219900	10% or 2 nos. of each type whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.05.01	MEASURING INSTRUMENTS	PNEUMATICS ISOLATION / BLOCK VALVES, ACTUATORS & ACCESSORIES (For all ON/OFF valves supplied under this package)	Pneumatic actuator assembly	84219900	10% or 1 no. of each type, model and rating, whichever is more.	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.05.02	MEASURING INSTRUMENTS	PNEUMATICS ISOLATION / BLOCK VALVES, ACTUATORS & ACCESSORIES (For all ON/OFF valves supplied under this package)	Diaphragms, O’ rings, seals etc. of all types make etc.	84219900	1 no of each type and rating	To be filled by bidder (+no. with (.))	To be filled by bidder	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder	Auto	Auto	Auto

							(+no. with (.))				(+no. with (.))			
II.1.05.03	MEASURING INSTRUMENTS	PNEUMATICS ISOLATION / BLOCK VALVES, ACTUATORS & ACCESSORIES (For all ON/OFF valves supplied under this package)	Limit switches (complete unit) & accessories (link assembly)	84219900	10% or 2 Nos., whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.05.04	MEASURING INSTRUMENTS	PNEUMATICS ISOLATION / BLOCK VALVES, ACTUATORS & ACCESSORIES (For all ON/OFF valves supplied under this package)	Pneumatic air-filter/Regulator of each type, make rating etc.	84219900	10% or 2 Nos., whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.05.05	MEASURING INSTRUMENTS	PNEUMATICS ISOLATION / BLOCK VALVES, ACTUATORS & ACCESSORIES (For all ON/OFF valves supplied under this package)	Solenoid valves	84219900	10% or 2 nos. of each type whichever is more	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.06.01	MEASURING INSTRUMENTS	ELECTRICAL ACTUATORS	Actuators	84219900	1 no of each type and rating	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.06.02	MEASURING INSTRUMENTS	ELECTRICAL ACTUATORS	Electronic PCB of all types	84219900	10% of each type & model	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
II.1.06.03	MEASURING INSTRUMENTS	ELECTRICAL ACTUATORS	Absolute Encoder (replaceable part)	84219900	5% of each type & model	To be filled by bidder (+no. with (.))	To be filled by bidder (+no.	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no.	Auto	Auto	Auto

							with (.))				with (.))			
II.1.06.04	MEASURING INSTRUMENTS	ELECTRICAL ACTUATORS	Electronic Torque sensor	84219900	5% of each type & model	To be filled by bidder (+no. with (.))	To be filled by bidder (+no. with (.))	Auto	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
						Grand Total			Auto				Auto	

1 Wherever set is mentioned, one set of the spares of that item shall be for complete replacement of that particular item for one equipment.
2 Any fraction of a item shall mean the next higher
3 Wherever quantity has been specified as percentage (%), the quantity of mandatory spares to be provided by contractor shall be the specified percentage (%) of the total population of the plant. In case, the quantity so calculated happens to be fraction, the same shall be rounded off to next higher whole number.
4 Wherever the quantities have been indicated for each type, size, thickness, material, radius, range, etc., these shall cover all the items supplied and installed and the
breakup for these shall be furnished in the bid.
5 In case, spares indicated in the list are not applicable to the particular design offered by the bidder, the bidder should offer spares applicable to offered design with quantities generally in line with the approach followed in the above list.
6 (*) Unless otherwise stated, a set shall mean complete replacement for one equipment.
7 Mandatory spares listed above is bare minimum requirement. In case any additional mandatory spares requirement is covered elsewhere in the tender specification apart from specified above, same shall be deemed to have been covered in bidders scope of supply.Bidder is also required to refer to notes mentioned at Annexure-II, Sub Section-E, Section-I in technical specification.

8. Wwherever quantity is specified both as a percentage and a value, the bidder has to supply the higher quantity until & unless specified otherwise.

Mandatory : Yes

Created formula(s)

Sr. No.	Formula for	Formula
1	Freight Amount (INR)	TOTAL EX - WORKS PRICE (DULY PACKED) (INR) * Freight % / 100
2	Total PRICE (EX-WORKS + FREIGHT) (INR)	Freight Amount (INR) + TOTAL EX - WORKS PRICE (DULY PACKED) (INR)
3	GST AMOUNT (INR)	Total PRICE (EX - WORKS + FREIGHT) (INR) * GST in % / 100
4	TOTAL FOR SITE PRICE (INR)	Total PRICE (EX - WORKS + FREIGHT) (INR) + GST AMOUNT (INR)

5	Total FOR site Price in words (INR)	TOTAL FOR SITE PRICE (INR)
6	Total PRICE (EX-WORKS + FREIGHT) (INR)	TOTAL (Total PRICE (EX - WORKS + FREIGHT) (INR))
7	TOTAL FOR SITE PRICE (INR)	TOTAL (TOTAL FOR SITE PRICE (INR))

SUPERVISION FOR SERVICES AND PG TEST

Total lumpsum firm prices inclusive of all prevailing taxes, duties and other levies for Services comprising of Supervisory service part for assembly, erection & commissioning, trial run at site and carrying out Performance guarantee at site, Training to Customer/ client personnel covering hands on experience of operation and maintenance and training at manufacturer's works for Gypsum Dewatering System.and handover in flawless condition of the package to the customer complete with all accessories for the total scope defined as per BHEL NIT & tender technical specification as specified above, amendment & agreements till placement of order.

S. NO.	ITEM DESCRIPTION	HSN CODE	UOM	QUANTITY	UNIT PRICE (INR)	TOTAL PRICE (INR)	GST TYPE	GST rate in %	GST AMOUNT (INR)	TOTAL FOR SITE PRICE (INR)	TOTAL FOR PRICE IN WORDS (INR)
Small text | Item No. | Show	Long text | Item name | Show	All numbers | HSN Code | Show	Small text | Unit of measurement | Show	All numbers | Quantity | Show	Unit rate | Show	All numbers | Total rate | Show	Other | Show	Other | Show	+no. with (.) | GST Applicable | Show	+no. with (.) | Other | Show	Long text | Other | Show
1.1.1	Total lump sum prices for visits (should include travel expenses to/ fro site, visa/ insurance (if applicable), intermediary stay) for Supervision of assembly, erection and commissioning, trial run at site & training to O&M staffs	998732	Nos.	4	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
1.1.2	Total lump sum prices for Supervision of assembly, erection and commissioning, trial run at site & taining to O&M staffs (6 days) at Site including visit charges, local transportation, boarding, lodging & other related expenses for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.	998732	days	60	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
1.2	Total Lump sump price for successful conductance of Performance Guarantee test and handover in	998732	LOT	1	To be	Auto	To be	To be	Auto	Auto	Auto

	flawless condition of the package to the customer at site visit charges, local transportation, boarding, lodging & other related exepenses				filled by bidder (+no. with (.))		filled by bidder (Combo Box)	filled by bidder (+no. with (.))			
1.3	Total Lump sump price for training of employees of customer at manufacturer's works (6 man-days including lodging and boarding)	998732	LOT	1	To be filled by bidder (+no. with (.))	Auto	To be filled by bidder (Combo Box)	To be filled by bidder (+no. with (.))	Auto	Auto	Auto
					Grand Total	Auto				Auto	

Note:

1 No. of days at site defined at S.N. 1.1.2 above shall be calculated on the basis of presence at site (travel time is excluded).

2 No. of Visits and days as mentioned at 1.1.1 & 1.1.2 above may vary, depending upon site requirement. Any variation in no. of visits & no. of days shall be exercised based on unit rate arrived from S.N. 1.1.1 & 1.1.2 above respectively.

3 Bidder to quote the Prices in ‘figures’ along with corresponding ‘words’.

Mandatory : Yes

Created formula(s)

Sr. No.	Formula for	Formula
1	TOTAL PRICE (INR)	QUANTITY * UNIT PRICE (INR)
2	GST AMOUNT (INR)	TOTAL PRICE (INR) * GST rate in % / 100
3	TOTAL FOR SITE PRICE (INR)	TOTAL PRICE (INR) + GST AMOUNT (INR)
4	TOTAL FOR PRICE IN WORDS (INR)	TOTAL FOR SITE PRICE (INR)
5	TOTAL PRICE (INR)	TOTAL (TOTAL PRICE (INR))
6	TOTAL FOR SITE PRICE (INR)	TOTAL (TOTAL FOR SITE PRICE (INR))

GRAND TOTAL

GRAND TOTAL (MAIN SUPPLY + MANDATORY SPARES + SUPERVISION FOR SERVICES & PG TEST)

S. NO.	DESCRIPTION	UNIT OF MEASUREMENT	QUANTITY	BIDDERS REMARKS	UNIT RATE	TOTAL EVALUATION PRICE (MAIN SUPPLY + MANDATORY SPARES + SUPERVISION FOR SERVICES & PG TEST)	TOTAL EVALUATION PRICE (MAIN SUPPLY + MANDATORY SPARES + SUPERVISION FOR SERVICES & PG TEST) IN WORDS
Long text | Other | Show	Long text | Item name | Show	Small text | Unit of measurement | Show	All numbers | Quantity | Show	Other | Show	All numbers | Other | Show	All numbers | Total rate | Show	Long text | Other | Show
1	GRAND TOTAL	LOT	1	To be filled by bidder (Combo Box)	Auto	Auto	Auto
			Grand Total			Auto	

Mandatory : Yes

Created formula(s)

Sr. No.	Formula for	Formula
1	TOTAL EVALUATION PRICE (MAIN SUPPLY + MANDATORY SPARES + SUPERVISION CHARGES)	TOTAL (TOTAL EVALUATION PRICE (MAIN SUPPLY + MANDATORY SPARES + SUPERVISION CHARGES))
2	TOTAL EVALUATION PRICE (MAIN SUPPLY + MANDATORY SPARES + SITE PERFORMANCE TESTING)	UNIT RATE
3	TOTAL EVALUATION PRICE (MAIN SUPPLY + MANDATORY SPARES + SUPERVISION CHARGES) IN WORDS	TOTAL EVALUATION PRICE (MAIN SUPPLY + MANDATORY SPARES + SUPERVISION CHARGES)
4	GRAND TOTAL_UNIT RATE	PRICE BID - MAIN SUPPLY_Total PRICE (EX - WORKS + FREIGHT) (INR) + PRICE BID - Mandatory spares_Total PRICE (EX - WORKS + FREIGHT) (INR) + SUPERVISION FOR SERVICES AND PG TEST_TOTAL PRICE (INR)

Points for consideration before filling above price schedule-

1.PRICES SHALL BE FIRM UNLESS OTHERWISE SPECIFICALLY INDICATED IN NIT .

2. Vendor to mention HSN Code in specific Column for each item of BOQ.

3. In case of discrepancy in GST rate corresponding to HSN code and quoted GST, the evaluation shall be done on quoted price and correct GST rate shall be considered for ordering (limited to quoted FOR Site price).

4. Unless the context requires otherwise, in all tenders and tender related documents any reference to taxes such as ED, CST/VAT, Services. Tax etc. shall refer to GST as implemented by GOI w.e.f. 1.07.2017.

5. CGST/SGST/UGST/IGST shall be paid at actuals against documentary evidence but restricted to the amount and percentage in the order/contract.
6. In case, any GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry to timeline prescribed in the relevant Act for availing such ITC, or any other reasons not attributable to BHEL, tax amount shall be recoverable from the vendor/contractor along with interest levied/leviable on BHEL.
7. All taxes and duties other than CGST/SGST/UGST/IGST shall be deemed to be included in the Ex-Works prices unless specified otherwise by the bidder in the price bid. No variation in other taxes and duties shall be payable by Purchaser.

Form properties

Price bid form	Yes	Multiple filling	No
Requires encryption	Yes	Requires document encryption	No
Requires bid supporting documents	No	Mandatory	Yes

Datatype

Data type	Example
Small Text	ABC etc.
Long Text	There are many variations of passages of Lorem Ipsum available, but the majority have suffered alteration in some form, by injected humour, or randomised words which don't look even slightly believable etc.
+No. with (.)	123, 12.30, 123.44, Zero etc.., values are allowed. Minus value are not allowed.
All Numbers	123, 1.23, -123, Zero etc.. Values are allowed.
Combo Box	List of combo box as created with alphanumeric characters