					FRICE FO	KIVIAI							
NAM	NAME OF PROJECT: 1 X 660 MW WBPDCL SAGARDIGHI EXTN UNIT V								Enquiry N	•			
NAM	IAME OF PACKAGE: DOUBLE GIRDER EOT CRANES (>100T CAPACI				Enquiry No								
TECHNICAL SPECIFICATION: PE-TS-445-501-A001				Supply			Е	E&C	Total S	Scope			
S. No.	DESCRIPT	TION	UNIT	QTY		Total Ex-Works Price (INR)	Freight %	Freight in INR	Total FOR Site Price Excluding GST	Unit E&C Price (INR)	Total E&C Price (INR)	Total Scope Price (Supply + E&C+ Mandatory Spares) (INR)	Total Scope Price (Supply + E&C+ Mandatory Spares) in Words
1.0	Total lump sum firm price for SUPPLY PART, SERVICE PART & MAI submission of drawing /documents including "As Built" drawings assembly, inspection / testing at vendor's & sub-vendor's works, consumables, mandatory spares alongwith spares for erection, startu shipment and delivery at site, unloading, handling, transportation & commissioning, trial run at site and carrying out performance guar and final handing over to end customer in flawless condition of crana accessories for the total scope defined as per BHEL NIT & tender tec of order.	and O&M manuals), engineering, manufacture, fabrication, painting, maintenance tools & tackles, fill of bubricants & p and commissioning as required, forwarding, proper packing, & storage at site, in-site transportation, assembly, erection & rantee/Functional/Demonstration tests at site (As applicable) e(s) for project and package specified above complete with all		1								₹ -	
2.0	MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE												
2.1	Total lump sum firm price for SUPPLY part comprising of /documents including "As Built" drawings and O&M manu- inspection / testing at vendor's & sub-vendor's works, painting, and commissioning as required, fill of lubricants & consumable site for project and package complete with all accessories for technical specification, amendment & agreements till placement	als), engineering, manufacture, fabrication, assembly, maintenance tools & tackles, spares for erection, startup s, forwarding, proper packing, shipment and delivery at for the total scope defined as per BHEL NIT & tender		2		₹ -		₹ -	₹ -			₹ -	
2.2	Total lump sum firm price for SERVICE part comprising of unli transportation, assembly, erection & commissioning, tr guarantee/Functional/Demonstration tests at site (As applicat condition of crane(s) for project and package complete with all & tender technical specification, amendment & agreements till p	rial run at site, and carrying out performance ole) and final handing over to end customer in flawless accessories for the total scope defined as per BHEL NIT		2							₹ -	₹ -	
2.3	Total lumpsum firm price for Mandatory spares comprising of m vendor's & sub-vendor's works, painting, forwarding, proper r tender technical specification above, amendment & agreement spares is to be furnished as per Annexure- I).	packing, shipment, delivery at site & guarantee as per	Lot	1	₹ -	₹ -		₹ -	₹ -			₹ -	

Note:
1) Bidder to quote the Prices in 'figures' along with corresponding 'words'.

P	Particulars of bidder / authorised representative					
١	Name	Designation	Signature	Date	Company Seal	

ANNEXURE-I					
LIST OF MANDATORY SPARES					
NAME OF PROJECT: 1 X 660 MW WBPDCL SAGARDIGHI EXTN UNIT V					
NAME OF PACKAGE: DOUBLE GIRDER EOT CRANES (>100T CAPACITY)					
TECHNICAL SPECIFICATION:	PE-TS-445-501-A001				

SI No.*	Description of the Equipment/Package Name	Quantity to be supplied for the Package	Total Ex-Works Price (INR)	
6.01.00	EOT Cranes			
6.01.01	Long Travel Unit			
(i)	Set of Bearings of Wheels	1Set for each type & capacity of EOT		
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT		
(iii)	Long Travel end Shaft Bearings	1Set for each type & capacity of EOT		
(iv)	Seals for Travel Gear Box	1Set for each type & capacity of EOT		
(v)	Long Travel Brake Shoes Liners	2Sets for each type & capacity of EOT		
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT		
(vii)	Brake Spring	1Set for each type & capacity of EOT		
(viii)	Brake Coil	2Sets for each type & capacity of EOT		
(ix)	Motor	1 No. for each type & capacity of EOT		
6.01.02	Cross Travel Unit			
(i)	Axle Bearings	1Set for each type & capacity of EOT		
(ii)	Set of Gearbox Bearings with Sleeves	1Set for each type & capacity of EOT		
(iii)	Set of seals for Gearbox	1Set for each type & capacity of EOT		
(iv)	Cross Travel end Shaft Bearing	1Set for each type & capacity of EOT		
(v)	Cross travel Brake Shoes Liners	2Sets for each type & capacity of EOT		
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT		
(vii)	Brake Spring	1Set for each type & capacity of EOT		
(viii)	Brake Coil	2Sets for each type & capacity of EOT		
(ix)	Motor	1 No. for each type & capacity of EOT		
6.01.03	Hoist	1 No. 101 each type & capacity of EO1		
(i)	Main Hoist Pulley Bearings [All Bearings of Each Type and size used in all Gear Assemblies, Lifting Hook, Trolley wheels etc.]	1 Set for each type & capacity of EOT		
(ii)	Set of Bearings for Gear box	1 Set for each type & capacity of EOT		
(iii)	Set of seals for Gearbox	1 Set for each type & capacity of EOT		
(iv)	Aux. Hoist Gearbox Bearings	1 Set for each type & capacity of EOT		
(v)	Aux. Hoist Gearbox Seals	1 Set for each type & capacity of EOT		
(vi)	Complete Set of Hydraulic Thruster for Brakes (if applicable)	1 No. for each type & capacity of EOT		
(vii)	Main & Aux. Hoist Brake Shoes [Brake shoes with lining for each size of brake (Pair of each size)]	2 Sets for each type & capacity of EOT		
(viii)	Main & Aux. Hoist Brake Springs	2 Sets for each type & capacity of EOT		
(ix)	Main & Aux. Hoist Brake shoe liners	2 Sets for each type & capacity of EOT		
(x)	Motor for Main Hoist & Auxiliary Hoist	1 No. for each type & capacity of EOT		
(xi)	Brake Coil	2 Sets for each type & capacity of EOT		
(xii)	Wire Rope for Aux. Hook	100% of one crane for each type & capacity of EOT		
6.01.04	Electrical			
(i)	Other Electrical Spares as applicable as per the Electrical List	Applicable Item & Quantity same as indicated in Electrical list 'B' Sl. no.7.08.00, 7.21.00.		
(ii)	Limit Switches for:			
(a)	Main Hoist	1 Set for each type & capacity of EOT		
(b)	Aux. Hoist	1 Set for each type & capacity of EOT		
(c)	Cross Travel	1 Set for each type & capacity of EOT		
(d)	Long Travel	1 Set for each type & capacity of EOT		
(iii)	Master Controller for :	51 (11.7)	İ	
(a)	Aux. Hoist	1 No. for each type & capacity of EOT		
(b)	Cross Travel	1 No. for each type & capacity of EOT		
(c)	Long Travel	1 No. for each type & capacity of EOT		
(iv)	VVVF Drive Complete Set for:	and the state of t		
(a)	Main Hoist	1 No. for each type & capacity of EOT		
(b)	Aux. Hoist	1 No. for each type & capacity of EOT		
(c)	Cross Travel	1 No. for each type & capacity of EOT		
(d)	Long Travel	1 No. for each type & capacity of EOT		
7.00.00	Electrical Items	Trivol for each type & capacity of EOT		
7.00.00	415V System			
7.08.00	11/0.415KV Transformer (for Each make, type and rating of Transformer)			
(i)	Door Limit Switch complete set	1 set (1 set means total requirement for one Transformer)		
(ii)	Neutral CT	1 no of each type and rating		
, ,			†	
(iii)	Temperature scanner	1 no.		

(v)	LV Bushing with metal parts, connectors and gaskets	3 No	
(vi)	LV neutral Bushing with metal parts, connectors and gaskets	1 No	
(vii)	Post Insulator	1 set (1 set means total requirement for one	
(viii)	Limb of complete LT & HT of temperature sensing	Transformer) 1 Set (1 set means total requirement for one	
7.08.02	devices 415V Air Circuit Breaker (for Each make, type and rating of ACB)	Transformer)	
(i)	Trip Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(ii)	Closing Coil	20% of total nos. or minimum 5 nos whichever is higher for each type and rating used in each switchgear (PCC/PMCC/MCC/ACDB)	
(iii)	Spring Charging Motor	2 nos.	
(iv)	Spring Charging Motor with complete Mechanism	2 nos.	
(v)	Spring Charged Limit Switch	5 nos.	
(vi)	Thermal Overload for Spring Charging Motor	2 nos.	
(vii)	Main Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(viii)	Arcing Contact (Fixed and moving) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(ix)	Breaker Jaw Contact (Bus-end & Breaker- end) assembly	5 sets (1 set consists of 3 nos.) for each type and rating	
(x)	Sliding Contact (Fixed & Moving)	3 sets.	
(xi)	Breaker Auxiliary Contact Block	5 nos.	
(xii)	Arcing Chute	2 sets (1 set consists of 3 nos.) for each type and rating	
(xiii)	Plug Socket with Prefab cable	3 nos	
(xiv)	Position Limit Switch	5 sets	- <u>-</u> -
7.08.03	415V PCC, PMCC, MCC, ACDB, DCDB, Elect. Control Panel (For each PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel) (applicable items of PCC, PMCC, MCC, ACDB, DCDB and Elect. Control Panel shall be considered)		
(i)	Indicating Lamps complete assembly		
(a)	Red	3 nos of each make and type.	
(b)	Blue	3 nos of each make and type.	
(c)	Green	3 nos of each make and type.	
(d) (e)	White Amber	3 nos of each make and type. 3 nos of each make and type.	
(ii)	CT	2 nos. for each make, type and Rating	
(iii)	Transducer	2 no for each make, type and Rating	
(iv)	Trip / Neutral / close Control Switch	2 nos. for each make, type and Rating	
(v)	Switch gear or MCC / Trial / Normal selector switch	2 nos. for each make, type and Rating	
(vi)	Local/Remote selector switch	2 nos. for each make, type and Rating	
(vii)	AC Supply On / Off Switch	1 no. for each make, type and Rating	
(viii)	DC Supply On / Off Switch	1 no. for each make, type and Rating	
(ix)	Motor Heater On /Off Switch	1 no. for each make, type and Rating	
(x)	DC Supply Source Selector Switch (3- position)	1 no. for each make, type and Rating	
(xi)	Ammeter Selector Switch	1 no. for each make, type and Rating	
(xii)	Voltmeter Selector Switch	1 no. for each make, type and Rating	
(xiii) (xiv)	Voltmeter Ammeter	2 no. for each make, type and Rating 2 no. for each make, type and Rating	
(xv)	Auxiliary Control Contactor	2 no. for each make, type and italing	
(a)	Auxiliary Control Contactor complete assembly	10% of total nos for each make, type and Rating.	
(b)	Auxiliary Control Contactor spare kits	10% of total nos. for each make, type and Rating.	
(c)	Auxiliary Control Contactor Coils	10% of total nos for each make, type and Rating.	
(xvi)	Power Contactor		
(a)	Power Contactor Complete Assembly	10% of total nos for each make, type and rating	
(b)	Power Contactor spare kits	10% of total nos for each make, type and Rating.	
	Power Contactor Coils	10% of total nos for each make, type and Rating.	
(c)	IBACCC13	5% of total nos. for each make, type and rating.	
(xvii)	MCCB	E0/ of total non-for-each make the same days	
(xvii)	MCB	5% of total nos. for each make, type and rating.	
(xvii) (xviii) (xix)	MCB Switch Fuse Unit (DC)	10% of total nos. for each make, type and rating.	
(xvii) (xviii) (xix) (xx)	MCB Switch Fuse Unit (DC) Power Fuse	10% of total nos. for each make, type and rating. 5% of total nos. for each make, type and rating.	
(xvii) (xviii) (xix) (xx) (xxi)	MCB Switch Fuse Unit (DC) Power Fuse Control Fuse	10% of total nos. for each make, type and rating. 5% of total nos. for each make, type and rating. 5% of total nos. for each make, type and rating.	
(xvii) (xviii) (xix) (xx)	MCB Switch Fuse Unit (DC) Power Fuse	10% of total nos. for each make, type and rating. 5% of total nos. for each make, type and rating.	

(xxiii)	Busbar to module Lira Contact assembly	2 sets of each make, type and rating (1 set means all 3 ph+ neutral)			
(xxiv) Control and Aux. Transformer		1 no of each make, type and rating			
(xxv)	Delay Timer	2 no of each make, type and rating			
(xxvi)	Power Terminal Block	2 sets for each make, type and rating			
(xxvii)	Control Terminal Block	2 sets for each make, type and rating			
(xxviii)	End plate for Power and Control terminal block	2 sets for each make, type and rating			
(xxix)	Energy meter	1 no for each make, type and rating			
(xxx)	Relays (Other than numerical relay):				
(a)	Conventional (Electromagnetic/Static type) Relay	2 no for each make, type and rating			
(b)	Aux. relays & Lock out relays & TIMERS	2 nos for each make, type and rating			
(xxxi)	MCCB Status (On/off) Monitoring Switch/Contact	2 nos for each make, type and rating			
(xxxii)	Push Button (On/Off) Complete Assembly	2 nos for each make, type and rating			
(xxxiii)	Annunciation Facia with lamps complete	1 set for each make, type and rating			
7.21.00	Motor				
7.21.02	415 Volt Motor				
(i)	End Shield Cover Driving & Non-Driving End	1 set for each type and rating of Motor			
(ii)	Heaters	2 sets for each type and rating of motor			
(iii)	Bearings (DE and NDE) for each type and rating of motor	2 sets			
(iv)	Cooling Fan for all type and rating of LT motors	One (1) set			
(v)	Dust seals and gaskets for each type of motors	1 Set			
(vi)	Motor Terminal Block	1 no. for each type and rating of Motor			
(vii)	Complete Set of Coupling	1 set for each type and rating			
	Total		₹ -		
NOTES:					
1	Bidder to refer Notes in Annexure-II of Technical Specification.				
2	*Refer Volume IIA, Reference clause of the "Customer Specification".				