BHEL UN-PRICE BID/ PRICE BID FORMAT FOR SUPPLY PORTION FOR INDIAN BIDDER.

Project: BIFPCL MAITREE 2X660MW TPS BANGLADESH Project

Item: 400KV GIS

Enquiry No: 277E048, dtd-01-06-2017

Format Revision-01

S.N	PI-ITEM	Unit	Qty	CURRENCY	HSN code	Unit Ex-works	Total Ex-works	Unit Freight & Insurance Charges (In India) upto Delivery Port	Total Inland F & I Charges upto Delivery Port	Goods and Service Tax (GST) on Ex-Works and F&I @ 0.1%	Total Cost at Place of delivery including GST
			(1)			(2)	(3) = (1) X (2)	(4)	(5) =(1)*(4)	(6) = (@0.1%) on { (3) + (5)}	(7) = [(3)+ (5)+(6)]
1	A1 - Supply - BusBar Modules	Set	2								
2	A2 - Supply - Bus VT & LA Modules for Main Buses	Set	2								
3	A3 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS GT bay Module (BAY NO. 403 & 409)	Set	2								
4	A4 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS BUS REACTOR bay Module (BAY NO. 406)	Set	1								
5	A5 - Supply - Equipped 400kV, 50kA for 1 second, SF6 GIS FUTURE GT bay Module (BAY NO. 412)	Set	1								
6	A6 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS LINE bay Module (BAY NO. 407 & 410)	Set	2								
7	A7 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS LINE REACTOR bay Module (BAY NO. 407R & 410R)	Set	2								
8	A8 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS ICT bay Module (BAY NO. 401 & 404)	Set	2								
9	A9 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS TIE bay Module (BAY NO. 402, 405, 408 & 411)	Set	4								
10	A10 - Supply - Single Phase isolated, 400kV, 50kA for 1 second, SF6 gas-insulated metal enclosed bus bars for Tie Bay interconnection	Set	9								
11	A11 - Supply - 400kV, 3150 GIS duct from GIS GT/Outgoing Lines to SF6 to Air bushing	Lot	1								
12	A12 - Supply - 400kV, 2500A GIS duct from GIS Bus Reactor/ Line Reactors/ICT to SF6 to Air bushing	Lot	1								
13	A13 - Supply - 400kV,3150A SF6 to Air Bushing	Nos	12								
14	A14 - Supply - 400kV, 2500A SF6 to Air Bushing	Nos	15								
15	A15 - Supply - Local Control Cubicles	Nos	15								
16	A16 - Supply - First filling of SF6 gas plus extra for compensating losses for 10 % of total gas (Bidder to indicate quantity).	Lot	1								
17	A17 - Supply of structure work for Installation of GIS including support structure for GIS ducts, SF6 to air bushings, supports, platforms, ladders, foundation bolts, embedded parts in floors etc., which are required for installation of GIS as per the specification. (The civil works will be done based on supplier design & drawings)	Lot	1								
18	A18 - Supply of Earthing material for GIS including High frequency earthing material. The quantity shall be estimated provided by bidder for above floor earthing connection.	Lot	1								
19	A19 -Supply - Consumables (with limited shelf life) required for GIS (Bidder to quote item wise with detailed BOQ for these consumables)	Lot	1								
20	A20 - Supply - Consumables required for GIS (with unlimited shelf life) (Bidder to quote item wise with detailed BOQ for these consumables)	Lot	1								
21	A21 - Supply - Controlled Switching Device for ONE set of 4000A, 3x1-phase, SF6 insulated circuit breaker without PIR, complete with operating mechanism (suitable for 1&3 phase auto reclose) (optional item)	Nos	1								
22	B1 - Supply - Mandatory Maintenance Equipment - SF6 gas filling and evacuating plant (portable)	Nos	1								

S.N	PI-ITEM	Unit	Qty	CURRENCY	HSN code	Unit Ex-works	Total Ex-works	Unit Freight & Insurance Charges (In India) upto Delivery Port	Total Inland F & I Charges upto Delivery Port	Goods and Service Tax (GST) on Ex-Works and F&I @ 0.1%	Total Cost at Place of delivery including GST
			(1)			(2)	(3) = (1) X (2)	(4)	(5) =(1)*(4)	(6) = (@0.1%) on { (3) + (5)}	(7) = [(3)+ (5)+(6)]
23	B2 - Supply - Mandatory Maintenance Equipment -SF6 gas Recycling & Purifying Plan (300 ltrs)	Nos	1								
24	B3 - Supply - Mandatory Maintenance Equipment -SF6 gas leak detector	Nos	1								
25	B4 - Supply - Mandatory Maintenance Equipment -Operating analyzer with DCRM kit	Nos	1								
26	B5 -Supply - Mandatory Maintenance Equipment -Dew Point Meter	Nos	1								
27	B6 - Supply - Mandatory Maintenance Equipment -Portable PD Monitoring equipment for GIS	Nos	1								
28	B7 - Supply - Mandatory Maintenance Equipment -Air Content Measurement	Nos	1								
29	C1- Supply - Mandatory Spares - SF6 gas pressure Relief Devices, 3 Nos. of each type	Sets	2								
30	C2- Supply - Mandatory Spares -SF6 Pressure gauge with coupling device cum switch or density monitors and pressure gauge, as applicable (1 no. of each type)	Set	1								
31	C3- Supply - Mandatory Spares -Rubber gaskets, “O” Rings and seals for SF6 gas, including Circuit Breaker, Disconnector and other GIS equipments (6 no. of each type)	Set	1								
32	C4- Supply - Mandatory Spares -Molecular filter for SF6 gas with filter bags(20 % of Total Supply)	Lot	1								
33	C5- Supply - Mandatory Spares -SF6 gas(20 % of Total Supply)	Lot	1								
34	C6.1- Supply - Mandatory Spares -For 1 phase enclosure (3 Nos. of each type)	Set	1								
35	C6.2- Supply - Mandatory Spares -Locking device to keep the Dis-connectors and Earthing switches in close or open position in case of removal of the driving mechanism (If applicable)	No.	3								
36	C6.3- Supply - Mandatory Spares -Bus support insulator of each type for single phase enclosure (6 Nos. of each type)	Set	1								
37	C6.4.1- Supply - Mandatory Spares -SF6 to air bushing for 1 phase enclosure (2500A)	Nos.	1								
38	C6.4.2- Supply - Mandatory Spares -SF6 to air bushing for 1 phase enclosure (3150A)	Nos.	1								
39	C6.5- Supply - Mandatory Spares -Spares for Local control cabinet including MCB, fuses, timers, Aux Relay of each type & rating, terminals of each type (Set)	No.	1								
40	C6.6- Supply - Mandatory Spares -All types of Corona shield (3 Nos. of each type)	Set	1								
41	C6.7- Supply - Mandatory Spares -Windowscope/ Observing window, 3 Nos. of each type (if applicable)	Set	1								
42	C7.1 - Supply - Mandatory Spares - CB - Complete Circuit Breaker 1 phase pole of each type & rating complete with interrupter, main circuit and enclosure with operating mechanism	Sets	3								
43	C7.2 - Supply - Mandatory Spares - CB -Fixed, moving and arcing contacts (3 nos. of each type)	Set	1								
44	C7.3 - Supply - Mandatory Spares - CB -Trip Coil assembly with resistor as applicable, 3 Nos. of each type	Sets	2								
45	C7.4 - Supply - Mandatory Spares - CB -Closing Coil assembly with resistor as applicable, 3 Nos. of each type	Sets	2								
46	C7.5 - Supply - Mandatory Spares - CB -Relays, Power contactors, push buttons, timers & MCBs etc of each type & rating	Set	1								
47	C7.6 - Supply - Mandatory Spares - CB -Closing assembly/ valve, 3 nos. of each type (If applicable)	Sets	2								
48	C7.7 - Supply - Mandatory Spares - CB -Trip assembly/ valve, 3 nos. of each type (If applicable)	Sets	2								

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			(1)			(2)	(3) = (1) X (2)	(4)	(5) =(1)*(4)	(6) = (@0.1%) on { (3) + (5)}	(7) = [(3)+ (5)+(6)]
49	C7.8 - Supply - Mandatory Spares - CB -Aux. switch assembly, 3 Nos. of each type	Set	1								
50	C7.9 - Supply - Mandatory Spares - CB -Operation counter, 3 nos. of each type	Set	1								
51	C7.10 - Supply - Mandatory Spares - CB -Rupture disc, 3 Nos. of each type (If applicable)	Set	1								
52	C7.11 - Supply - Mandatory Spares - CB -Set of spares for pneumatic/spring/hydraulic operated mechanism Spare for pneumatic operated mechanism a. Motor for compressor – one no. b. Pressure switch and valve – one no. of each type Spare for spring operated mechanism a . Motor – one no. b. Limit switch – one no. of each type Spare for hydraulic operated mechanism a. Motor – one no. b. Limit switch – one no. of each type	Set	1								
53	C7.12 - Supply - Mandatory Spares - CB -Insulating nozzle (6 nos. each) (1 Set for each type of Circuit Breaker)	Set	1								
54	C8.1 - Supply - Mandatory Spares -Disconnector - Complete set of 3 nos. of single phase disconnector including main circuit, enclosure and driving mechanism	Set	1								
55	C8.2 - Supply - Mandatory Spares -Disconnector - High speed/ fast acting fault making grounding switch, 3 nos. of single phase of each rating, including main circuit, enclosure and driving mechanism	Set	1								
56	C8.3 - Supply - Mandatory Spares - Disconnector -3 nos. of single phase Earthing switch including main circuit, and driving mechanism	Set	1								
57	C8.4 - Supply - Mandatory Spares - Disconnector -Copper contact fingers for disconnector male & female contact – for one complete (3phase) disconnector of each type & rating	Set	1								
58	C8.5 - Supply - Mandatory Spares - Disconnector - Copper contact fingers for earthing switch male & female contact – for one complete (3phase) earthing switch of each type & rating	Set	1								
59	C8.6 - Supply - Mandatory Spares - Disconnector -Open/ close contactor assembly, timers, key interlock for one complete (3phase) disconnector and earthing switch of each type & rating	Set	1								
60	C8.7 - Supply - Mandatory Spares - Disconnector -Push button switch – each type	Set	1								
61	C8.8.1 - Supply - Mandatory Spares - Limit switches and Aux. switches for complete 3-phase equipment For Disconnector	Sets	3								
62	C8.8.2 - Supply - Mandatory Spares - Limit switches and Aux. switches for complete 3-phase equipment For earth switch	Set	1								
63	C8.8.3 - Supply - Mandatory Spares - Limit switches and Aux. switches for complete 3-phase equipment For High speed earth switch	Set	1								
64	C8.9.1 - Supply - Mandatory Spares -Rotor housing bearing assembly for complete 3-phase equipment For Disconnector	Sets	2								
65	C8.9.2 - Supply - Mandatory Spares -Rotor housing bearing assembly for complete 3-phase equipment For earth switch	Set	1								
66	C8.9.3 - Supply - Mandatory Spares -Rotor housing bearing assembly for complete 3-phase equipment For high speed earth switch	Set	1								
67	C8.10.1- Supply - Mandatory Spares -Motor with gear assembly for complete 3-phase equipment For Disconnector	Sets	3								
68	C8.10.2 - Supply - Mandatory Spares -Motor with gear assembly for complete 3-phase equipment For earth switch	Set	1								

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			(1)			(2)	(3) = (1) X (2)	(4)	(5) =(1)*(4)	(6) = (@0.1%) on { (3) + (5)}	(7) = [(3)+ (5)+(6)]
69	C8.10.3 - Supply - Mandatory Spares - Motor with gear assembly for complete 3-phase equipment For high speed earth switch	Set	1								
70	C8.11.1 - Supply - Mandatory Spares -Bearings for complete 3-phase equipment For Disconnector	Sets	5								
71	C8.11.2 - Supply - Mandatory Spares - Bearings for complete 3-phase equipment For earth switch	Set	1								
72	C8.11.3 - Supply - Mandatory Spares - Bearings for complete 3-phase equipment For high speed earth switch	Set	1								
73	C8.12 - Supply - Mandatory Spares -Disconnector - Interlocking coil with resistors, timers, key interlock for complete 3 phase equipment, as applicable (each type & rating)	Set	1								
74	C8.13.1 - Supply - Mandatory Spares -Relays, Power contactors, resistors, fuses, push buttons, timers & MCBs (Complete for one 3 phase equipment) For Disconnector	Sets	3								
75	C8.13.2 - Supply - Mandatory Spares - Relays, Power contactors, resistors, fuses, push buttons, timers & MCBs (Complete for one 3 phase equipment) For earth switch	Set	1								
76	C8.13.3- Supply - Mandatory Spares - Relays, Power contactors, resistors, fuses, push buttons, timers & MCBs (Complete for one 3 phase equipment) For high speed earth switch	Set	1								
77	C9.1 - Supply - Mandatory Spares - Complete CT, as applicable, with enclosure, as applicable, 1 no. of each type & rating	Set	1								
78	C10.1 - Supply - Mandatory Spares - Gas Insulated complete VT with enclosure	No.	1								
79	D1 - Supply Item - Final Spares required for long term routine/ planned and breakdown maintenance (Optional)	lot	1								
80	D2 - Supply Item - Commissioning spares for testing & commissioning of GIS till handing over	lot	1								
81	E1 - Supply Item - Tools & tackle & Testing Equipment -Hygrometer	Nos.	1								
82	E2 - Supply Item - Tools & tackle & Testing Equipment -Portable dust counter	Nos.	1								
83	E3 - Supply Item - Tools & tackle & Testing Equipment -Special gas mask for GIS maintenance	Nos.	5								
84	E4 - Supply Item - Tools & tackle & Testing Equipment) -Vacuum meter	Nos.	1								
85	E5 - Supply Item - Tools & tackle & Testing Equipment -Digital contact resistance meter	Nos.	1								
86	E6 - Supply Item - Tools & tackle & Testing Equipment -Mobile platform	Nos.	1								
87	E7 - Supply Item - Tools & tackle & Testing Equipment -Power operated insulation tester	Nos.	1								
88	E8 - Supply Item - Tools & tackle & Testing Equipment -Tong testers of suitable ranges	Nos.	1								
89	E9 - Supply Item - Tools & tackle & Testing Equipment -Contact resistance measuring set for micro ohms	Nos.	1								
90	E10 - Supply Item - Tools & tackle & Testing Equipment -Non -returnable tools & tackles	lot	1								
100	H1 -Supply - Any other item required for completion of project and not covered in A to E - Complete List to be provided by bidder along with unit prices.	lot	1								
102	I1 - Supply - 400kV, 4000A Circuit breaker (1 pole complete without enclosure without operating mechanism)	No	1								
103	I2 - Supply -400kV, 4000A Circuit breaker with PIR (1 pole complete without enclosure without operating mechanism)	No	1								
104	I3 - Supply -400kV, 4000A Isolator (1 pole) without operating mechanism	No	1								

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			(1)			(2)	(3) = (1) X (2)	(4)	(5) =(1)*(4)	(6) = (@0.1%) on { (3) + (5)}	(7) = [(3)+ (5)+(6)]
105	I4 - Supply - 400 kV Maintenance Earhing switch without operating mechanism	No	1								
106	I5 - Supply - 400kV High speed earth switch without operating mechanism	No	1								
107	I6 - Supply - 400kV Current transformer (1 of each type) (Individual prices to be furnished).	No	1								
108	I7 - Supply - Operating Mechanism box for 400kV, 4000 A Circuit Breaker	No	1								
109	I8 - Supply - Operating Mechanism box for 400kV, 4000 A Isolator	No	1								
110	I9 - Supply - Operating mechanism for 400kV, Maintenance Earthing Switch	No	1								
111	I10 - Supply -Operating Mechanism for 400kV, High Speed Earthing Switch	No	1								
112	I11 - Supply - Single Phase Bus bar (Any type)	m	1								
113	I12 - Supply -Conductor for Single phase Bus bar/ bus duct (any type)	kg	10								
114	I13 - Supply - GIS metallic enclosure (any type)	m	1								
115	I14 - Supply - Epoxy resin insulators for bus suppoert with holes for gas flow (of each type and rating)	Set	1								
116	I15 - Supply -Gas barrier insulators (of each type and rating)	Set	1								
117	I16 - Supply - Density switch	no.	1								
118	I17 - Supply -Gas monitoring system devices	lot	1								
119	I18 - Supply -PD sensor	No.	1								
120	I19 - Supply - Optical indicator for CB, Isolator	No.	1								
121	I20 - Supply -Elbow /Angle / T-bends	No.	1								
122	I21 - Supply -Telescopic enclosure	No.	1								
123	I22 - Supply - Sleeve enclsoure	No.	1								
124	I23 - Supply -Expansion joints for bellows	m	1								
125	I24 - Supply -cross tank	No.	1								
			204								
					Total Ex-works price =						
								Total F&I =			
								Total GST on Ex-works and F&I =			
								Total Cost at Place of delivery including GST =			

Note:

1. Serial No of BOQ in UN-PRICED BID is to be mapped in line with BOQ as mentioned in Technical Specification/Uploaded as amendment.

2. Each cell to be filled by bidder in the price bid. In case that cell is not applicable as per NIT condition, NA must be mentioned in UN-PRICED BID.

3. In UN-PRICED, Bidder to indicated QUOTED in placed of price. NA in case of not applicable.

4. Bidder stickly to quote in BHEL format only. Other format of price bid will be liable for rejection.

5. Bidder to quote strictly as per BOQ. Rates/prices shall not be combined. In case the charges/prices are combined, BHEL resrves the right to reject the offer. Decision of BHEL shall be final.

6. GST applicable in case of export project @ 0.1% as per notification no 41/2017-Integrated Tax (rate), dtd 23.10.2017.

7. All taxes except GST as applicable in/ outside India shall be borne by the Bidder.

BHEL UN-PRICE BID/ PRICE BID FORMAT FOR SERVICE PORTION FOR INDIAN BIDDER

Project: BIFPCL MAITREE 2X660MW TPS BANGLADESH Project
Item: 400KV GIS
Enquiry No: 277E048, dtd-01-06-2017

Format Revision-01

S.N	PI-ITEM	Unit	Qty	Currency	SAC CODE	Unit Charges	Total Charges	Goods and Service Tax in India (GST) on services	Total Cost Including GST
			(1)			(2)	(3) = (2) X (1)	(4) =……..% of (3)	[(5) =(3)+(4)] [TOTAL CHARGES]
91	F1 - Services: Insulation co-ordination studies	lot	1						
92	F2 -Services: Site visit for supervision of unloading, storage & verification of material at store	lot	1						
93	F3 -Services: Supervision of Erection of GIS	Set	1						
94	F4 -Services: Supervision of Erection of GIS Duct (2500/3150/4000A) - GIS to SF6 to Air Bushings	lot	1						
95	F5 -Services: Supervision of Erection of complete SF6 to Air Bushing (2500A/3150A)	Set	27						
96	F6 -Services:Testing & Commissioning of GIS	Set	1						
97	F7 -Services: Final successful Testing of GIS including HV test kit	lot	1						
98	G1 -Services: Training for GIS to BIFPCL/BHEL engineers -Visit to manufacturer's works = 30 mandays	lot	1						
99	G2 -Services: Training for GIS to BIFPCL/BHEL engineers -ETC, Operation and maintenance of Plant (GIS) at site = 30 mandays	lot	1						
101	H2 -Services - Any other item required for completion of project and not covered in F&G - Complete List to be provided by bidder along with unit prices.	lot	1						
126	I25 - Services of manpower for erection per day (excl. travel time)	days	1						
127	I26 - Services of manpower for Testing & commissioning per day (excl. travel time)	days	1						
128	I27 - Hiring charges of HV test kit	lot	1						
			39						
A							**Total Charges =**		
B								**Total GST =**	
C									**Total Cost Including GST (A + B)=**

Note:

1. Serial No of BOQ in UN-PRICED BID is to be mapped in line with BOQ as mentioned in Technical Specification/Uploaded as amendment.
2. Each cell to be filled by bidder in the price bid. In case that cell is not applicable as per NIT condition, NA must be mentioned in UN-PRICED BID.
3. In UN-PRICED, Bidder to indicated QUOTED in placed of price. NA in case of not applicable.
4. Bidder stickly to quote in BHEL format only. Other format of price bid will be liable for rejection.
5. Bidder to quote strictly as per BOQ. Rates/prices shall not be combined. In case the charges/prices are combined, BHEL resrves the right to reject the offer. Decision of BHEL shall be final.
6. All taxes except GST as applicable in/outside India shall be borne by the Bidder

BHEL UN-PRICE BID/ PRICE BID FORMAT FOR SUPPLY PORTION FOR FOREIGN BIDDER

Enquiry No: 277E048, dtd-01-06-2017

Project: BIFPCL MAITREE 2X660MW TPS BANGLADESH Project

Item: 400KV GIS

Format Revision 01

S.N	PI-ITEM	Unit	Qty	Currency	Unit CIF value at Discharge port	Total CIF value at Discharge port
	Applicable formula to bidder--------->		**(1)**		**(2)**	**(3) = (2) X (1)**
1	A1 - Supply - BusBar Modules	Set	2			
2	A2 - Supply - Bus VT & LA Modules for Main Buses	Set	2			
3	A3 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS GT bay Module (BAY NO. 403 & 409)	Set	2			
4	A4 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS BUS REACTOR bay Module (BAY NO. 406)	Set	1			
5	A5 - Supply - Equipped 400kV, 50kA for 1 second, SF6 GIS FUTURE GT bay Module (BAY NO. 412)	Set	1			
6	A6 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS LINE bay Module (BAY NO. 407 & 410)	Set	2			
7	A7 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS LINE REACTOR bay Module (BAY NO. 407R & 410R)	Set	2			
8	A8 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS ICT bay Module (BAY NO. 401 & 404)	Set	2			
9	A9 - Supply - Fully equipped 400kV, 50kA for 1 second, SF6 GIS TIE bay Module (BAY NO. 402, 405, 408 & 411)	Set	4			
10	A10 - Supply - Single Phase isolated, 400kV, 50kA for 1 second, SF6 gas-insulated metal enclosed bus bars for Tie Bay interconnection	Set	9			
11	A11 - Supply - 400kV, 3150 GIS duct from GIS GT/Outgoing Lines to SF6 to Air bushing	Lot	1			
12	A12 - Supply - 400kV, 2500A GIS duct from GIS Bus Reactor/ Line Reactors/ICT to SF6 to Air bushing	Lot	1			
13	A13 - Supply - 400kV,3150A SF6 to Air Bushing	Nos	12			
14	A14 - Supply - 400kV, 2500A SF6 to Air Bushing	Nos	15			
15	A15 - Supply - Local Control Cubicles	Nos	15			
16	A16 - Supply - First filling of SF6 gas plus extra for compensating losses for 10 % of total gas (Bidder to indicate quantity).	Lot	1			
17	A17 - Supply of structure work for Installation of GIS including support structure for GIS ducts, SF6 to air bushings, supports, platforms, ladders, foundation bolts, embedded parts in floors etc., which are required for installation of GIS as per the specification. (The civil works will be done based on supplier design & drawings).	Lot	1			
18	A18 - Supply of Earthing material for GIS including High frequency earthing material. The quantity shall be estimated provided by bidder for above floor earthing connection.	Lot	1			
19	A19 -Supply - Consumables (with limited shelf life) required for GIS (Bidder to quote item wise with detailed BOQ for these consumables)	Lot	1			
20	A20 - Supply - Consumables required for GIS (with unlimited shelf life) (Bidder to quote item wise with detailed BOQ for these consumables)	Lot	1			
21	A21 - Supply - Controlled Switching Device for ONE set of 4000A, 3x1-phase, SF6 insulated circuit breaker without PIR, complete with operating mechanism (suitable for 1&3 phase auto reclose) (optional item)	Nos	1			
22	B1 - Supply - Mandatory Maintenance Equipment - SF6 gas filling and evacuating plant (portable)	Nos	1			
23	B2 - Supply - Mandatory Maintenance Equipment -SF6 gas Recycling & Purifying Plan (300 ltrs)	Nos	1			
24	B3 - Supply - Mandatory Maintenance Equipment -SF6 gas leak detector	Nos	1			
25	B4 - Supply - Mandatory Maintenance Equipment -Operating analyzer with DCRM kit	Nos	1			
26	B5 -Supply - Mandatory Maintenance Equipment -Dew Point Meter	Nos	1			
27	B6 - Supply - Mandatory Maintenance Equipment -Portable PD Monitoring equipment for GIS	Nos	1			
28	B7 - Supply - Mandatory Maintenance Equipment -Air Content Measurement	Nos	1			
29	C1- Supply - Mandatory Spares - SF6 gas pressure Relief Devices, 3 Nos. of each type	Sets	2			
30	C2- Supply - Mandatory Spares -SF6 Pressure gauge with coupling device cum switch or density monitors and pressure gauge, as applicable (1 no. of each type)	Set	1			
31	C3- Supply - Mandatory Spares -Rubber gaskets, “O” Rings and seals for SF6 gas, including Circuit Breaker, Disconnector and other GIS equipments (6 no. of each type)	Set	1			
32	C4- Supply - Mandatory Spares -Molecular filter for SF6 gas with filter bags(20 % of Total Supply)	Lot	1			
33	C5- Supply - Mandatory Spares -SF6 gas(20 % of Total Supply)	Lot	1			
34	C6.1- Supply - Mandatory Spares -For 1 phase enclosure (3 Nos. of each type)	Set	1			
35	C6.2- Supply - Mandatory Spares -Locking device to keep the Dis-connectors and Earthing switches in close or open position in case of removal of the driving mechanism (If applicable)	No.	3			
36	C6.3- Supply - Mandatory Spares -Bus support insulator of each type for single phase enclosure (6 Nos. of each type)	Set	1			
37	C6.4.1- Supply - Mandatory Spares -SF6 to air bushing for 1 phase enclosure (2500A)	Nos.	1			
38	C6.4.2- Supply - Mandatory Spares -SF6 to air bushing for 1 phase enclosure (3150A)	Nos.	1			
39	C6.5- Supply - Mandatory Spares -Spares for Local control cabinet including MCB, fuses, timers, Aux Relay of each type & rating, terminals of each type (Set)	No.	1			
40	C6.6- Supply - Mandatory Spares -All types of Corona shield (3 Nos. of each type)	Set	1			

Enquiry No: 277E048, dtd-01-06-2017

Project: BIFPCL MAITREE 2X660MW TPS BANGLADESH Project

Item: 400KV GIS

Format Revision 01

S.N	PI-ITEM	Unit	Qty	Currency	Unit CIF value at Discharge port	Total CIF value at Discharge port
41	C6.7- Supply - Mandatory Spares -Windowscope/ Observing window, 3 Nos. of each type (if applicable)	Set	1			
42	C7.1 - Supply - Mandatory Spares - CB - Complete Circuit Breaker 1 phase pole of each type & rating complete with interrupter, main circuit and enclosure with operating mechanism	Sets	3			
43	C7.2 - Supply - Mandatory Spares - CB -Fixed, moving and arcing contacts (3 nos. of each type)	Set	1			
44	C7.3 - Supply - Mandatory Spares - CB -Trip Coil assembly with resistor as applicable, 3 Nos. of each type	Sets	2			
45	C7.4 - Supply - Mandatory Spares - CB -Closing Coil assembly with resistor as applicable, 3 Nos. of each type	Sets	2			
46	C7.5 - Supply - Mandatory Spares - CB -Relays, Power contactors, push buttons, timers & MCBs etc of each type & rating	Set	1			
47	C7.6 - Supply - Mandatory Spares - CB -Closing assembly/ valve, 3 nos. of each type (If applicable)	Sets	2			
48	C7.7 - Supply - Mandatory Spares - CB -Trip assembly/ valve, 3 nos. of each type (If applicable)	Sets	2			
49	C7.8 - Supply - Mandatory Spares - CB -Aux. switch assembly, 3 Nos. of each type	Set	1			
50	C7.9 - Supply - Mandatory Spares - CB -Operation counter, 3 nos. of each type	Set	1			
51	C7.10 - Supply - Mandatory Spares - CB -Rupture disc, 3 Nos. of each type (If applicable)	Set	1			
52	C7.11 - Supply - Mandatory Spares - CB -Set of spares for pneumatic/spring/hydraulic operated mechanism Spare for pneumatic operated mechanism a. Motor for compressor – one no. b. Pressure switch and valve – one no. of each type Spare for spring operated mechanism a . Motor – one no. b. Limit switch – one no. of each type Spare for hydraulic operated mechanism	Set	1			
53	C7.12 - Supply - Mandatory Spares - CB -Insulating nozzle (6 nos. each) (1 Set for each type of Circuit Breaker)	Set	1			
54	C8.1 - Supply - Mandatory Spares -Disconnector - Complete set of 3 nos. of single phase disconnector including main circuit, enclosure and driving mechanism	Set	1			
55	C8.2 - Supply - Mandatory Spares -Disconnector - High speed/ fast acting fault making grounding switch, 3 nos. of single phase of each rating, including main circuit, enclosure and driving mechanism	Set	1			
56	C8.3 - Supply - Mandatory Spares - Disconnector -3 nos. of single phase Earthing switch including main circuit, and driving mechanism	Set	1			
57	C8.4 - Supply - Mandatory Spares - Disconnector -Copper contact fingers for disconnector male & female contact – for one complete (3phase) disconnector of each type & rating	Set	1			
58	C8.5 - Supply - Mandatory Spares - Disconnector - Copper contact fingers for earthing switch male & female contact – for one complete (3phase) earthing switch of each type & rating	Set	1			
59	C8.6 - Supply - Mandatory Spares - Disconnector -Open/ close contactor assembly, timers, key interlock for one complete (3phase) disconnector and earthing switch of each type & rating	Set	1			
60	C8.7 - Supply - Mandatory Spares - Disconnector -Push button switch – each type	Set	1			
61	C8.8.1 - Supply - Mandatory Spares - Limit switches and Aux. switches for complete 3-phase equipment For Disconnector	Sets	3			
62	C8.8.2 - Supply - Mandatory Spares - Limit switches and Aux. switches for complete 3-phase equipment For earth switch	Set	1			
63	C8.8.3 - Supply - Mandatory Spares - Limit switches and Aux. switches for complete 3-phase equipment For High speed earth switch	Set	1			
64	C8.9.1 - Supply - Mandatory Spares -Rotor housing bearing assembly for complete 3-phase equipment For Disconnector	Sets	2			
65	C8.9.2 - Supply - Mandatory Spares -Rotor housing bearing assembly for complete 3-phase equipment For earth switch	Set	1			
66	C8.9.3 - Supply - Mandatory Spares -Rotor housing bearing assembly for complete 3-phase equipment For high speed earth switch	Set	1			
67	C8.10.1- Supply - Mandatory Spares -Motor with gear assembly for complete 3-phase equipment For Disconnector	Sets	3			
68	C8.10.2 - Supply - Mandatory Spares -Motor with gear assembly for complete 3-phase equipment For earth switch	Set	1			
69	C8.10.3 - Supply - Mandatory Spares - Motor with gear assembly for complete 3-phase equipment For high speed earth switch	Set	1			
70	C8.11.1 - Supply - Mandatory Spares -Bearings for complete 3-phase equipment For Disconnector	Sets	5			
71	C8.11.2 - Supply - Mandatory Spares - Bearings for complete 3-phase equipment For earth switch	Set	1			
72	C8.11.3 - Supply - Mandatory Spares - Bearings for complete 3-phase equipment For high speed earth switch	Set	1			
73	C8.12 - Supply - Mandatory Spares -Disconnector - Interlocking coil with resistors, timers, key interlock for complete 3 phase equipment, as applicable (each type & rating)	Set	1			
74	C8.13.1 - Supply - Mandatory Spares -Relays, Power contactors, resistors, fuses, push buttons, timers & MCBs (Complete for one 3 phase equipment) For Disconnector	Sets	3			

Enquiry No: 277E048, dtd-01-06-2017

Project: BIFPCL MAITREE 2X660MW TPS BANGLADESH Project

Item: 400KV GIS

Format Revision 01

S.N	PI-ITEM	Unit	Qty	Currency	Unit CIF value at Discharge port	Total CIF value at Discharge port
75	C8.13.2 - Supply - Mandatory Spares - Relays, Power contactors, resistors, fuses, push buttons, timers & MCBs (Complete for one 3 phase equipment) For earth switch	Set	1			
76	C8.13.3- Supply - Mandatory Spares - Relays, Power contactors, resistors, fuses, push buttons, timers & MCBs (Complete for one 3 phase equipment) For high speed earth switch	Set	1			
77	C9.1 - Supply - Mandatory Spares - Complete CT, as applicable, with enclosure, as applicable, 1 no. of each type & rating	Set	1			
78	C10.1 - Supply - Mandatory Spares - Gas Insulated complete VT with enclosure	No.	1			
79	D1 - Supply Item - Final Spares required for long term routine/ planned and breakdown maintenance (Optional)	lot	1			
80	D2 - Supply Item - Commissioning spares for testing & commissioning of GIS till handing over	lot	1			
81	E1 - Supply Item - Tools & tackle & Testing Equipment -Hygrometer	Nos.	1			
82	E2 - Supply Item - Tools & tackle & Testing Equipment -Portable dust counter	Nos.	1			
83	E3 - Supply Item - Tools & tackle & Testing Equipment -Special gas mask for GIS maintenance	Nos.	5			
84	E4 - Supply Item - Tools & tackle & Testing Equipment) -Vacuum meter	Nos.	1			
85	E5 - Supply Item - Tools & tackle & Testing Equipment -Digital contact resistance meter	Nos.	1			
86	E6 - Supply Item - Tools & tackle & Testing Equipment -Mobile platform	Nos.	1			
87	E7 - Supply Item - Tools & tackle & Testing Equipment -Power operated insulation tester	Nos.	1			
88	E8 - Supply Item - Tools & tackle & Testing Equipment -Tong testers of suitable ranges	Nos.	1			
89	E9 - Supply Item - Tools & tackle & Testing Equipment -Contact resistance measuring set for micro ohms	Nos.	1			
90	E10 - Supply Item - Tools & tackle & Testing Equipment -Non -returnable tools & tackles	lot	1			
100	H1 -Supply - Any other item required for completion of project and not covered in A to E - Complete List to be provided by bidder along with unit prices.	lot	1			
102	I1 - Supply - 400kV, 4000A Circuit breaker (1 pole complete without enclosure without operating mechanism)	No	1			
103	I2 - Supply -400kV, 4000A Circuit breaker with PIR (1 pole complete without enclosure without operating mechanism)	No	1			
104	I3 - Supply -400kV, 4000A Isolator (1 pole) without operating mechanism	No	1			
105	I4 - Supply - 400 kV Maintenance Earhing switch without operating mechanism	No	1			
106	I5 - Supply - 400kV High speed earth switch without operating mechanism	No	1			
107	I6 - Supply - 400kV Current transformer (1 of each type) (Individual prices to be furnished).	No	1			
108	I7 - Supply - Operating Mechanism box for 400kV, 4000 A Circuit Breaker	No	1			
109	I8 - Supply - Operating Mechanism box for 400kV, 4000 A Isolator	No	1			
110	I9 - Supply - Operating mechanism for 400kV, Maintenance Earthing Switch	No	1			
111	I10 - Supply -Operating Mechanism for 400kV, High Speed Earthing Switch	No	1			
112	I11 - Supply - Single Phase Bus bar (Any type)	m	1			
113	I12 - Supply -Conductor for Single phase Bus bar/ bus duct (any type)	kg	10			
114	I13 - Supply - GIS metallic enclosure (any type)	m	1			
115	I14 - Supply - Epoxy resin insulators for bus suppoert with holes for gas flow (of each type and rating)	Set	1			
116	I15 - Supply -Gas barrier insulators (of each type and rating)	Set	1			
117	I16 - Supply - Density switch	no.	1			
118	I17 - Supply -Gas monitoring system devices	lot	1			
119	I18 - Supply -PD sensor	No.	1			
120	I19 - Supply - Optical indicator for CB, Isolator	No.	1			
121	I20 - Supply -Elbow /Angle / T-bends	No.	1			
122	I21 - Supply -Telescopic enclosure	No.	1			
123	I22 - Supply - Sleeve enclsoure	No.	1			
124	I23 - Supply -Expansion joints for bellows	m	1			
125	I24 - Supply -cross tank	No.	1			
			204			
					Total CIF value at Discharge port =	

Note:

1. Serial No of BOQ in UN-PRICED BID is to be mapped in line with BOQ as mentioned in Technical Specification/Uploaded as amendment.

2. Each cell to be filled by bidder in the price bid. In case that cell is not applicable as per NIT condition, NA must be mentioned in UN-PRICED BID.

3. In UN-PRICED, Bidder to indicated QUOTED in placed of price. NA in case of not applicable.

4. Bidder stickly to quote in BHEL format only. Other format of price bid will be liable for rejection.

5. Bidder to quote strictly as per BOQ. Rates/prices shall not be combined. In case the charges/prices are combined, BHEL resrves the right to reject the offer. Decision of BHEL shall be final.

6. All taxes as applicable inside/outside India shall be borne by the Bidder

BHEL UN-PRICE BID/ PRICE BID FORMAT FOR SERVICE PORTION FOR FOREIGN BIDDER

Enquiry No: 277E048, dtd-01-06-2017

Project: BIFPCL MAITREE 2X660MW TPS BANGLADESH Project

Item: 400KV GIS

Format Revision -01

S.N	PI-ITEM	Unit	Qty	Currency	Unit Charges	Total cost to BHEL
			(1)		(2)	[(3)=(2)*(1)] [TOTAL CHARGES]
91	F1 - Services: Insulation co-ordination studies	lot	1			
92	F2 -Services: Site visit for supervision of unloading, storage & verification of material at store	lot	1			
93	F3 -Services: Supervision of Erection of GIS	Set	1			
94	F4 -Services: Supervision of Erection of GIS Duct (2500/3150/4000A) - GIS to SF6 to Air Bushings	lot	1			
95	F5 -Services: Supervision of Erection of complete SF6 to Air Bushing (2500A/3150A)	Set	27			
96	F6 -Services:Testing & Commissioning of GIS	Set	1			
97	F7 -Services: Final successful Testing of GIS including HV test kit	lot	1			
98	G1 -Services: Training for GIS to BIFPCL/BHEL engineers -Visit to manufacturer's works = 30 mandays	lot	1			
99	G2 -Services: Training for GIS to BIFPCL/BHEL engineers -ETC, Operation and maintenance of Plant (GIS) at site = 30 mandays	lot	1			
101	H2 -Services - Any other item required for completion of project and not covered in F&G - Complete List to be provided by bidder along with unit prices.	lot	1			
126	I25 - Services of manpower for erection per day (excl. travel time)	days	1			
127	I26 - Services of manpower for Testing & commissioning per day (excl. travel time)	days	1			
128	I27 - Hiring charges of HV test kit	lot	1			
			39			
					Total cost to BHEL =	

Note:

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