

(A-2)

Schedule 4D: Installation and Other Services Country

Item	Description (For detailed description, please refer to specification and Schedule A)	Unit	Quantity	Unit Price ¹		Total Price ¹	
				Local Currency [in BDT]	Foreign Currency [in]	Local Currency [in BDT]	Foreign Currency [in]
1	2	3	4	5	6	7 = 4x5	8 = 4x6
c)	Control and Protection Panel including mimic, Auxiliary relays (TCS, Lockout etc.) test plugs, wiring, lighting, heater, humidity sensor & other accessories	Lot	1				
1F-15	Complete Control, Protection, monitoring including BCU for transformer circuits (132/23 kV)	set	2				
a)	Each comprising	Lot	1				
b)	BCU with required I/Os	Set	1		x		
c)	Control and Protection Panel including mimic, Auxiliary relays (TCS, Lockout etc.) Test plugs, wiring, lighting, heater, humidity sensor & other accessories	Lot	1				
1F-16	Tariff metering	lot	1				
a)	Meters (One meter for each 33kV feeder)	lot	1				
b)	Panel including test plugs, wiring, lighting, heater, humidity sensor & other accessories	lot	1				
1G	Multicore Cables						
1G.1	Multicore Cables for control, protection, metering & power circuits						
i)	LV Control Cable	lot	1				
ii)	LV Power Cable	lot	1				
1H	Earthing and Lightning Protection						
1H.1	Earthing system for complete substation	lot	1				
1H.2	Lighting Protection System for complete substation	lot	1				
1I	Batteries, chargers & DC distribution						
1I.1	110V Ni-cad Batteries with chargers & distribution board & others						
a)	for 400kV System						
i)	110V Battery Banks, Ah	set					
ii)	Charger, A	set	N/A				
iii)	110V DC Distribution panel, MCC type	lot					
b)	for 220kV System						
i)	110V Battery Banks, Ah	set	2				
ii)	Charger, A	set	2				
iii)	110V DC Distribution panel	lot	1				
iv)	Inverter for SAS	set	2				
c)	for 132kV System						
i)	110V Battery Banks, Ah	set	2				
ii)	Charger, A	set	2				
iii)	110V DC Distribution panel	lot	1				
1I.2	48V Ni-cad Batteries with chargers & distribution board						
i)	48V battery Banks, Ah	set	2				
ii)	Charger, A	set	2				
iii)	48V DC Distribution Panel	lot	1				
1J	LVAC Distribution						
1J.1	AC 415V or 240V distribution panels	lot	1				
1J.2	Tariff metering at LV side (Main & Check)	lot	1				
1J.3	Power Factor Correction Plant in 415V Bus	lot	1				
1K	Civil Works, Building and Foundation						
1K.1	Complete land development and slope protection						
i)*	Complete land development with earned/desired earth filling including approach road	cum	156395				
ii)*	Slope protection	sqm	5650				
a.	Slope (1V/2H) protection with turfing	sqm	2500				
b.	Slope (1V/2H) protection with CC block						
1K.2	Complete civil items required for outdoor works						
i)	Outdoor gantry foundation including lower foundation in 220kV switchyard	not.	37				
a.	Gantry column for main bus and jack bus	Deleted					
b	Gantry column for jack bus						
ii)	Outdoor equipment foundation in 220kV switchyard						
a.*	CB	set**	8				
b.*	DS without ES	set**	14				
c.*	DS with ES	set**	9				

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Item	Description (For detailed description, please refer to specification and Schedule A)	Unit	Quantity	Unit Price ¹		Total Price ¹	
				Local Currency [in BDT]	Foreign Currency [in]	Local Currency [in BDT]	Foreign Currency [in]
1	2	3	4	5	6	7 = 4x5	8 = 4x6
d*	CT	nos	27				
e*	CVT	nos	27				
f*	SA	nos	21				
g	PI	nos	16				
iii)	Outdoor gantry foundation including tower foundation in 132kV switchyard	nos	57				
a.	Gantry column for main bus and jack bus	Deleted					
b.	Outdoor equipment foundation in 132kV switchyard						
iv)							
a*	CB	sal**	10				
b*	DS without ES	sal**	18				
c*	DS with ES	sal**	11				
d*	CT	nos	33				
e*	JVT	nos	33				
f*	SA	nos	27				
g	PI	nos	20				
vi*	Outdoor equipment foundation in 33kV switchyard for auxiliary transformer						
a.	CB	sal**	2				
b.	DS	sal**	4				
c.	JVT	nos	9				
d.	SA	nos	9				
e.	CT	nos	6				
vii)	Outdoor gantry/tubular bus bar foundation in 33kV switchyard for auxiliary transformer	lot	1				
vi*)	Outdoor equipment foundation in 33kV switchyard for incomer LV side of 132/33 kV transformer						
a.	CB	sal**	2				
b.	DS	sal**	4				
c.	JVT	nos	12				
d.	SA	nos	6				
e.	CT	nos	6				
viii)	Outdoor gantry/tubular bus bar foundation in 33kV switchyard	lot	1				
ix*)	Transformer pad with foundation including oil pit						
a.	225/300MVA transformer	nos.	3				
b.	80/120MVA transformer	nos.	2				
c.	Auxiliary Transformer	nos.	2				
xj*)	Blast wall with gantry foundation	nos.	5				
xj)	Boundary wall for overall plan						
a.	Boundary wall without retaining wall	m	750				
xj*)	Substation main gate	nos.	1				
xii)	Chain link fencing	m	220				
xii*)	Approach road (pavement width 6m)	m	20				
xv)	Internal road						
a.	6m wide road	m	300				
b.	3m wide road	m	1200				
c.	1.5 walk way	m	50				
xvi)	Surface drain	m	720				
xvi*)	Cable trench/turn with soak pit	lot	1				
xviii)	Whole substation surface finishing with drainage system including outlet (excluding surface drain)	lot	1				
xx)	Gravel laying in switchyard area	lot	1				
xx*)	Septic tank cum soak well	nos.	2				
xxi)	Pump shed including deep tube well, motor, pump, water reservoir, water pipe line, electrical connection etc.	nos.	2				
xxii*)	Guard house	nos.	1				
xxiii*)	Sentry post	nos.	4				
xxiv*)	Car port	nos.	1				
xxv*)	Ansar barrack	nos.	1				
xxvi*)	Open Store Yard	sqm	625				
xxvii*)	Property Line Demarcation	m	810				
xxviii*)	RCC box culvert (minimum 8mX6m)	nos.	1				

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Item	Description (For detailed description, please refer to specification and Schedule A)	Unit	Quantity	Unit Price1			Total Price1		
				Local Currency [in BDT]	Foreign Currency [in]	Foreign Currency [in]	Local Currency [in BDT]	Foreign Currency [in]	Foreign Currency [in]
1	2	3	4	5	6	7	8	9	10
b)	for 230kV System								
i)	110V Battery Banks, Ah	set	2						
ii)	Charger, A	set	2						
iii)	110V DC Distribution panel	lot	1						
iv)	Inverter for SAS	set	2						
c)	for 132kV System								
i)	110V Battery Banks, Ah	set	2						
ii)	Charger, A	set	2						
iii)	110V DC Distribution panel	lot	1						
2I.2	48V Ni-cad Batteries with chargers & distribution board								
i)	48V battery Banks, Ah	set	2						
ii)	Charger, A	set	2						
iii)	48V DC Distribution Panel	lot	1						
2J	LVAC Distribution								
2J.1	AC 415V or 240V distribution panels	lot	1						
2J.2	Tariff metering at LV side(Main & Check)	lot	1						
2J.3	Power Factor Correction Plant in 415V Bus	lot	1						
2K	Civil Works, Building and Foundation								
2K.1	Complete land development and slope protection								
i)*	Complete land development with carried/dredged earth filling including approach road	cum	128850						
ii)	Slope protection	sqm	6150						
a.*	Slope (1V:2H) protection with turfing								
2K.2	Complete civil items required for outdoor works								
i)	Outdoor gantry foundation including lower foundation in 230kV switchyard	nos	36						
a.	Gantry column for main bus and jack bus	Deleted							
b.	Gantry column for jack bus								
ii)	Outdoor equipment foundation in 230kV switchyard								
a.*	CB	set**	7						
b.*	DS without ES	set**	12						
c.*	DS with ES	set**	8						
d.*	CT	nos	24						
e.*	CVT	nos	24						
f.*	SA	nos	18						
g	PI	nos	14						
iii)	Outdoor gantry foundation including lower foundation in 132kV switchyard								
a.	Gantry column for main bus and jack bus	nos	45						
b.	Gantry column for jack bus	Deleted							

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Schedule 4D: Installation and Other Services Country

Item	Description (For detailed description, please refer to specification and Schedule A)	Unit	Quantity	Unit Price ¹		Total Price ¹	
				Local Currency [in BDT]	Foreign Currency [in]	Local Currency [in BDT]	Foreign Currency [in]
1	2	3	4	5	6	7 = 4x5	8 = 4x6
iv)	Outdoor equipment foundation in 132KV switchyard						
a.*	_CB	set**	7				
b.*	_DS without ES	set**	12				
c.*	_DS with ES	set**	8				
d.*	_CT	nos	24				
e.*	_JVT	nos	24				
f.*	_SA	nos	18				
g	_PI	nos	14				
v)	Outdoor equipment foundation in 33KV switchyard for auxiliary transformer						
a.	_CB	set**	2				
b.	_DS	set**	4				
c.	_JVT	nos	6				
d.	_SA	nos	6				
e.	_CT	nos	6				
vi)	Outdoor gantry/hubular bus bar foundation in 33KV switchyard for auxiliary transformer	lot	1				
vii)*	Outdoor equipment foundation in 33KV switchyard for incoming LV side of 132/63 KV transformer						
a.	_CB	set**	2				
b.	_DS	set**	4				
c.	_JVT	nos	12				
d.	_SA	nos	6				
e.	_CT	nos	6				
viii)	Outdoor gantry/hubular bus bar foundation in 33KV switchyard	lot	1				
ix)*	_Transformer pad with foundation including oil pit						
a.	_225/300MVA transformer	nos.	2				
b.	_80/120MVA transformer	nos.	2				
c.	_Auxiliary Transformer	nos.	2				
x)*	_Blot wall with gantry foundation	nos.	4				
xi)*	_Boundary wall for overall plan						
a.	_Boundary wall without retaining wall	m	750				
xii)*	_Substation main gate	nos.	1				
xiii)*	_Chain link fencing	m	220				
xiv)*	_Approach road (pavement width 6m)	m	20				
xv)*	_Internal road						
a.	_6m wide road	m	310				
b.	_3m wide road	m	950				

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Section 4: Bidding Forms

PTSIREP, Package-2

Schedule 4D: Installation and Other Services Country

Item	Description (For detailed description, please refer to specification and Schedule A)	Unit	Quantity	Unit Price ¹		Total Price ¹	
				Local Currency [In BDT]	Foreign Currency [In]	Local Currency [In BDT]	Foreign Currency [In]
1	2	3	4	5	6	7 = 4x5	8 = 4x6
3G	36kV Circuit						
	Multicore Cables						
3G.1	Multicore Cables for control, protection, metering & power circuits						
i)	LV Control Cable	lot	1				
ii)	LV Power Cable	lot	1				
3H	Earthing and Lightning Protection						
3H.1	Earthing system for two new 132KV bay	lot	1				
3H.2	Lighting Protection System for two new 132KV bay	lot	1				
3I	Batteries, chargers & DC distribution						
3I.1	Extension of 110V DC distribution panels & others	lot	1				
3I.2	Extension of 48V DC distribution panels & others	lot	1				
3J	LVAC Distribution						
3J.1	Extension of AC 415V or 240V distribution panels & others	lot	1				
3K	Civil Works, Building and Foundation						
3K.1	Complete civil items required for outdoor works						
i)	Outdoor gantry foundation including tower foundation in 132KV switchyard	nos	8				
a.	Gantry column for main bus and jack bus	Deleted					
ii)	Outdoor equipment foundation in 132KV switchyard						
a.*	CB	set**	2				
b.*	DS without ES	set**	4				
c.*	DS with ES	set**	2				
d.*	CT	nos	6				
e.*	JVT	nos	6				
f.*	SA	nos	6				
g	PI	nos	4				
iii)	Cable trench/tunnel with soak pit	lot	1				
iv)	Switchyard surface finishing with drainage system including outlet (excluding surface drain)	lot	1				
v)	Gravel laying in switchyard area	lot	1				
3K.2*	Testing of Foundation						
i)	Uplift test of pile	nos.	1				
3K.3	Complete fire fighting system for transformers including water pond/reservoir, pipe network and pump	lot	0				
3L	Lighting, small power, air conditioning and Ventilation, Solar						
3L.1	Lighting, small power, air conditioning and Ventilation and emergency DC lighting for control building and local	Deleted					
3L.2	Lighting for outside building for security, roadway, switchyard.	lot	1				
3M	Fibre Optic Multiplexer Equipment and PLC Equipment for Communication and Protection						
3M.1	Extension of existing/upgradation of Indoor Fibre Optic Multiplexer Equipment. (If alternate proposal other than	lot	1				
3M.2	under ground optical fiber cable, armoured, 48 core including Outdoor termination box, indoor MDF/OOF &	lot	1				
3N	SCADA system for Telecontrol and Telemetering						
3N.1	Complete SCADA hardware & software	lot	1				
TOTAL OF SECTION III (Carried to Schedule 5 Grand Summary)							

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