

ABSTRACT

**SCHEDULE : Conversion of AIS panel to GIS panel at 33/11 kV Substation at ESD, Phuentsholing and Gurungdara,
Darla**

Figures in BTN/INR

Sl. No.	Particulars	Amount
1	Price Schedule For Supply & Delivery of Substation Equipment	-
2	Price Schedule for Erection, Testing & Commissioning of Substation Equipment	-
3	GIS Spare Parts	-
	Total	-

SCHEDULE 1A: SCHEDULE FOR SUPPLY AND DELIVERY OF SUBSTATION EQUIPMENT (Pling)

Sl. No	Description	Unit	Qty	Unit Price (DDP Site)	Total price
			1	2	3=1x2
A	Equipment				
1	33 kV GIS switchgear with numerical relays, synchro-check relay, meters, CTs, line PTs as per specifications.	Set	5		
a)	630A, VCB - GIS Panel (3 incomer/outing, 2 transformer Out-going and 1 buscoupler)				
b)	PT with under voltage relay in the incomer panel and Buscoupler				
B	Cables				
1	HV cables - outdoor and indoor termination kits				
a)	33 kV termination for GIS panel	Set	4		
2	LV cables, control and instrumentation cables				
a)	Instrumentation Cables with lugs and glands				
	3 C x 2.5 sqmm	Mtr	100		
	5 C x 2.5 sqmm	Mtr	200		
	12 C x 2.5 sqmm	Mtr	200		
C	Cabling system				
a)	Aluminium Cable Trays, 50x50x5(angle), 30x5 mm(flat), 300 mm(width) with support material	Mtr	15		
b)	Conduits, bends, tees, junction boxes, accessories for cabling system.	L.S	1		
D	Earthing and lightning protection system				
a)	50 x 6 mm GI flat for riser including nuts & bolts.	Mtr	20		
E	Miscellaneous Item				
a)	Rubber mats as per specifications	Nos	5		
	TOTAL WORKS				-

SCHEDULE 1A: SCHEDULE FOR SUPPLY AND DELIVERY OF SUBSTATION EQUIPMENT (Pling)

Sl. No	Description	Unit	Qty	Unit Price (DDP Site)	Total price
			1	2	3=1x2

SCHEDULE 1B: SCHEDULE FOR SUPPLY AND DELIVERY OF SUBSTATION EQUIPMENT (Gurungdara)

				Unit Price (DDP Site)	Total price
			1	2	3=1x2
A	Equipment				
1	33 kV GIS switchgear with numerical relays, synchro-check relay, meters, CTs, line PTs as per specifications	Set	5		
a)	630A, VCB - GIS Panel (3 incomer/outing, 2 transformer Out-going and 1 buscoupler)				
b)	PT with under voltage relay in the incomer panel and Buscoupler				
B	Cables				
1	HV cables - outdoor and indoor termination kits				
a)	33 kV XLPE cable, 300 sqmm	Mtr	200		
b)	33 kV termination for GIS panel	Set	4		
c)	33 kV OD termination for incomer tapping	Set	2		
2	LV power, control and instrumentation cables				
a)	Instrumentation cables with lugs and glands				
	3 C x 2.5 sqmm	Mtr	100		
	5 C x 2.5 sqmm	Mtr	200		
	12 C x 2.5 sqmm	Mtr	200		
C	Cabling system				
a)	Aluminium Cable Trays, 50x50x5(angle), 30x5 mm(flat), 300 mm(width) with support material	Mtr	15		
b)	Conduits, bends, tees, junction boxes, accessories for cabling system.	L.S	1		
D	Earthing and lightning protection system				
a)	50 x 6 mm GI flat for riser including nuts & bolts.	Mtr	20		
E	Miscellaneous Item				
a)	Rubber mats as per specifications	Nos	5		
	1B - TOTAL WORKS				
	TOTAL WORKS				

**SCHEDULE 2A: SCHEDULE FOR ERECTION TESTING AND COMMISSIONING OF
SUBSTATION EQUIPMENT (Pling)**

Sl. No	Description	Unit	Provisional Qty	Unit Rate	Amount (Nu)
A	Equipment		1	2	3=1x2
1	33kV switchgear with numerical relays, meters, CTs, line PTs as per specifications.	Set	5		
a)	630A, VCB (2 incomer, 2 outgoing, 1 transformer feeder, 1 buscoupler)				
b)	Bus PT panel with under voltage relay (cost to be included in a)				
c)	Prices should be inclusive of floor leveling as required at the site for GIS panels				
2	Dismantling of 33kV AIS switchgear along with the control relay panel (CRP) and transport to ESD store	Set	2		
B	Cables including supply of tiles and sand as required for direct burial				
1	HV Cables - outdoor and indoor termination kits				
a)	33 kV GIS termination, Heat Shrinkable	Set	5		
2	LV power, control and instrumentation cables including the earthing strip connections	Lot	1		
C	Cabling system				
a)	Erection of all accessories with cable trays, conduits, bends, tees, junction boxes, accessories for cabling system.	Lot	1.00		
2A - TOTAL WORKS					

**SCHEDULE 2B: SCHEDULE FOR ERECTION TESTING AND COMMISSIONING OF
SUBSTATION EQUIPMENT (Gurungdara)**

Sl. No	Description	Unit	Provisional Qty	Unit Rate	Amount (Nu)
A	Equipment		1	2	3=1x2
1	33kV switchgear with numerical relays, meters, CTs, line PTs as per specifications.	Set	5		
a)	630A, VCB (2 incomer, 2 outgoing, 1 transformer feeder, 1 buscoupler)				
b)	Bus PT panel with under voltage relay (cost to be included in a)				
c)	Prices should be inclusive of floor leveling as required at the site for GIS panels				
2	Dismantling of 33kV AIS switchgear along with the control relay panel (CRP) and transport to ESD store	Set	5		
3	Dismantling of 33 kV outdoor VCB, 12.5 kA 630 Amps with outdoor support structures and other associated panels and transport to ESSD store, Gedu	Set	2		
B	Cables including supply of tiles and sand as required for direct burial				
1	HV Cables - outdoor and indoor termination kits				
a)	33 kV XLPE cable, 300 sqmm	Mtr	200		
b)	33 kV termination for GIS panel	Set	5		
c)	33 kV OD termination for incomer tapping	Set	2		
2	LV power, control and instrumentation cables including the earthing strip connections	Lot	1		

**SCHEDULE 2A: SCHEDULE FOR ERECTION TESTING AND COMMISSIONING OF
SUBSTATION EQUIPMENT (Pling)**

Sl. No	Description	Unit	Provisional Qty	Unit Rate	Amount (Nu)
C	Cabling system				
a)	Erection of all accessories with cable trays, conduits, bends, tees, junction boxes, accessories for cabling system.	Lot	1		
D	DISMANTLING				
1	Dismantling steelwork including all equipment (LAs, PLCC trapping, Isolators, CTs, PTs, 33 kV outdoor breakers etc) in built up sections in channels, angles, tees and flats in all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking and transport to Gidakom, ESD Thimphu store.	KG	3000.00		
2	Control Panel for 33 kV Line and transformer protection	NOs	4		
	2B - TOTAL WORKS				
	TOTAL WORKS				

SCHEDULE 5: SCHEDULE FOR SUPPLY OF ESSENTIAL SPARES

Sl. No	Description	Unit	Qty	Unit Price (DDP Site)	Total price
			1	2	3=1x2
1.0	SWITCHGEAR				
1.1	33kV (VCB break -GIS insulated)				
1.1.1	Closing Coil	Nos.	4		
1.1.2	Trip Coil	Nos.	5		
1.1.3	Current Transformer (1 set - 3 phases) for outgoing	Set	2		
1.1.4	33 kV termination for GIS panel	Set	2		
	TOTAL OF SPARE ITEMS				