

Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP), Package-2

Section A LILO of Cumilla North- Shahjibazar 230kV double circuit Line at Madhobpur 230/132/33kV Substation

Item	Description	Unit	Quantity	Local Currency in BDT	
				Unit EXW Price ¹	EXW Total Price ¹
1	2	3	4	5	6=4*5
Schedule No. 2A Plant and Mandatory Spare Parts Supplied from Within the Employer's Country					
5.2	Insulator and Fittings				
	Insulator sets complete with insulators and all hardware fittings including suspension clamps, tension dead ends, armour rods, arcing horn. Arcing ring etc				
	Overland Portion				
5.2.1	120kN single suspension Insulators set for "twin ACSR Mallard" - Complete Assembly	set	5		
5.2.2	120kN jumper suspension set for "Twin ACSR Mallard" - Complete Assembly	set	5		
5.2.3	210kN twin tension set for "Twin ACSR Mallard" - Complete Assembly	set	6		
5.3	Phase conductor, earthwire, OPGW & Fittings				
5.3.1	Midspan Joint for "ACSR Mallard" conductor	each	5		
5.3.2	Repair sleeve for "ACSR Mallard" conductor	each	5		
5.3.3	Vibration Damper for ACSR Mallard Conductor	each	15		
5.3.4	Spacer Damper for Twin Bundle "ACSR Mallard"	each	5		
5.3.5	Jumper Spacer for Twin Bundle "ACSR Mallard"	each	10		
5.3.6	Suspension set for 7x4.00mm Equivalent OPGW	each	5		
5.3.7	Tension set for 7x4.00mm Equivalent OPGW	each	8		
5.3.8	Vibration damper for 7x4.00mm Equivalent OPGW	each	3		
5.4	Temporary earthing equipment	each	1		
5.5	Elcometer	each	0		
5.6	Motorised jointing compressor for conductor complete with dies suitable for all conductors to be used for this Contract	each	1		
Total Columns 6 to be carried forward to Schedule No. 5 - Grand Summary					

Name of Bidder _____

Signature of Bidder _____

1. In accordance with specifications in Bid Data Sheet under ITB 19.1 .

2 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

3. All sections, considered here is for one single project. If an item (alongwith unit price) is not available in a section but available in another section of this contract; during execution, if such item (alongwith unit price) is needed to be used in the section where item is not available then such item (alongwith unit price) can be used in the section where it is not available. If the same exists in more than one item lowest unit price among them will be considered.

4. If any bidder claims domestic preference for any item in Schedule 2, they must quote at least 30% of the price for that specific item in BDT (Bangladeshi Taka) as per ITB 19.2 of BDS

Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP), Package-2

Section B LILO of Sripur-Ashuganj 230kV double circuit Line at Monohardi 230/132/33kV Substation

Item	Description	Unit	Quantity	Local Currency in BDT	
				Unit EXW Price1	EXW Total Price1
1	2	3	4	5	6=4*5
Schedule No. 2B Plant and Mandatory Spare Parts Supplied from Within the Employer's Country					
5.3	Phase conductor, earthwire, OPGW & Fittings				
5.3.1	Midspar Joint for "ACSR Mallard" conductor	each	5		
5.3.2	Repair sleeve for "ACSR Mallard" conductor	each	5		
5.3.3	Vibration Damper for ACSR Mallard Conductor	each	15		
5.3.4	Spacer Damper for Twin Bundle "ACSR Mallard"	each	5		
5.3.5	Jumper Spacer for Twin Bundle "ACSR Mallard"	each	10		
5.3.6	Suspension set for 7x4.00mm Equivalent OPGW	each	5		
5.3.7	Tension set for 7x4.00mm Equivalent OPGW	each	8		
5.3.8	Vibration damper for 7x4.00mm Equivalent OPGW	each	3		
5.4	Temporary earthing equipment	each	1		
5.5	Elcometer	each	0		
5.6	Motorised jointing compressor for conductor complete with dies suitable for all conductors to be used for this Contract	each	0		
Total Columns 6 be carried forward to Schedule No. E. Grand Summary					

Name of Bidder _____

Signature of Bidder _____

1. In accordance with specifications in Bid Data Sheet under ITB 19.1.

2 Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

3. All sections, considered here is for one single project. If an item (alongwith unit price) is not available in a section but available in another section of this contract, during execution, if such item (alongwith unit price) is needed to be used in the section where item is not available then such item (alongwith unit price) can be used in the section where it is not available. If the same exists in more than one item lowest unit price among them will be considered.

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Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP).

Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP), Package-2

Section C: (Monohardi-Bajitpur 132kV double circuit line)

Item	Description	Unit	Quantity (1)	Foreign currency in $\square$		Local currency in BDT	
				EXW Unit Price ¹ (2)	EXW Total Price ¹ (1) x (2)	EXW Unit Price ¹ (3)	EXW Total Price ¹ (1) x (3)
9	Aerial Markers						
9.1	Bird diverters	each	20				
9.2	Bird guards	each	0				
9.3	Aircraft warning spheres	each	0				
9.4	Air craft obstruction lights solar powered complete with lamps, solar, panels, batteries, control equipment cables, support framework, tower work platform etc.	each	0				
10	Tower Earthing						
10.1	Earthing type A	each	60				
10.2	Earthing type B	each	10				
10.3	Earthing type C	each	4				
10.4	Earthing type D (If required by specific soil conditions)	each	1				
11	Tower Paint and Counterweights						
11.1	Tower Paint						
(a)	Coal tar epoxy coatings on all tower steelwork up to 3.0m/HFL whichever is greater from ground level in accordance with the requirements of the Technical Specification	per tower	75				
(b)	Painting of tower having total height above GL exceeds 60m for aircraft navigation in accordance with the requirements of the Technical Specification	per tower	0				
(c)	Painting of tower (Reflecting Paint) upto 3 meter above epoxy coat in submerge area in accordance with the requirements of the Technical Specification	per tower	5				
11.2	Counterweights for 120kN suspension insulator sets complete with yoke plate attachment bolts to be used for 1D1 towers:						
(a)	- 40kg set	each	6				
(b)	- 80kg set	each	6				
(c)	- 120kg set	each	6				
12	Mandatory Spare Parts and Tools						
12.1	Tower type 1DL Standard	each	0				
12.2	Tower type 1DL+6m	each	0				
12.3	Tower type 1DL+9m	each	0				
12.4	Tower type 1D1+15m	each	0				
12.5	Tower type 1D25+9m	each	0				
12.6	Tower type 1DT6+0m	each	0				
12.7	Tower type 1DT6+9m	each	0				
12.8	Conductor ACSR GROSBEAK type	km	5				
12.9	One optical fibre ground wire, 48 fibres OPGW, equivalent to 7X3.25mm (59mm ²) GSW earthwire	km	2				
12.10	Single suspension string, 70 kN (including insulators, fittings, suspension clamp)	each	18				
12.11	Single suspension string, heavy 120 kN (including insulators, fittings, suspension clamp)	each	6				
12.12	Single tension string, 120 kN (including insulators, jumper, fittings, tension clamp)	each	36				
12.13	OPGW 48 fibres (7X3.25mm GSW type earthwire equivalent) suspension set	each	6				
12.14	OPGW 48 fibres (7X3.25mm GSW type earthwire equivalent) tension set	each	10				
12.15	OPGW joint box	each	2				
12.16	Vibration damper for ACSR Grosbeak conductor	each	60				
12.17	Vibration damper for OPGW (7X3.25mm GSW type earthwire equivalent)	each	20				
12.18	Repair sleeve for ACSR Grosbeak conductor	each	20				
12.19	Midspan joints for ACSR Grosbeak conductor	each	10				
12.20	Bird diverters	each	0				
12.21	Bird guard	each	18				
12.22	Aircraft warning spheres	each	0				
13	Miscellaneous						
13.1	Set of temporary earthing equipment, as described in Annex 16-1	set	2				
13.2	Elcometer for measuring galvanization thickness	each	0				
13.3	Terminal ground resistance tester (tools)	each	1				
13.4	Fusion splicer OPGW (tools)	each	1				
Total (to Schedule No. 5. Grand Summary)							

1. In accordance with specifications in Bid Data Sheet under ITB 19.1.

2. Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.

3. All sections, considered here is for one single project. If an item (alongwith unit price) is not available in a section but available in another section of this contract; during execution, if such item (alongwith unit price) is needed to be used in the section where item is not available then such item (alongwith unit price) can be used in the section where it is not available. If the same exists in more than one item lowest unit price among them will be considered.

4. If any bidder claims domestic preference for any item in Schedule 2, they must quote at least 30% of the price for that specific item in BDT (Bangladeshi Taka) as per ITB 19.2 of BDS

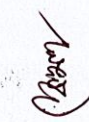
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Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP), Package-2									
Section A) ULO of Cumilla North- Shahjibazar 230KV double circuit Line at Madhobpur 230/132/33KV Substation									
Item	Description	Unit	Quantity	Unit Price1		Total Price1			
				Local Currency Portion [BDT]	Foreign Currency Portion []	Local Currency Portion [BDT]	Foreign Currency Portion []		
1	2	3	4	5	6	7=4x5	8=4x6		
Schedule No. 4A Installation and Other Services									
7.5	Environmental Management & Monitoring Plan Implementation including Environmental Parameter Testing (as per EMP i.e., Monthly/ Quarterly) and Ecological study"	lump sum	1						
7.6	STI, STD and HIV/AIDS alleviation program	lump sum	1						
7.7	Payment for Compensation(For resettlement of affected people, dwelling/commercial structures, trees, crops etc. on the Right of Way and preparation of a sketch map for tower footing compensation as per employers requirement)	lump sum	1						
7.8	Tree plantation in 1:3 ratio for the ROW clearance as per EMP.	lump sum	1						
8	Dismantling & Bypass								
8.1(a)	Dismantling of existing line section (including tower, conductor, insulator and other accessories) whichever is required for line in/out.	per span	2.00						
8.1 (b)	Storing the dismantled materials at Power Grid Store	per span	2.00						
8.2	By passing the required line section with ERS. ERS for by passing shall be collected from Power Grid store	per span	4.00						
8.3	Dismantling of by pass line after completing line in line out and storing the ERS of by pass line as Power Grid store	per span	4.00						
Total Columns 7 & 8 to be carried forward to Schedule No. 5 - Grand Summary									

Name of Bidder
Signature of Bidder

1. In accordance with specifications in Bid Data Sheet under ITB 19.1.
2. Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is exclusive sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in this unit rate.
3. All sections, considered here is for one single project. If an item (alongwith unit price) is not available in another section of this contract during execution, (if such item (alongwith unit price) is needed to be used in the section where item is not available then such item (alongwith unit price) can be used in the section where it is not available. If the same exists in more than one item lowest unit price among them will be considered.
4. As per ITB 19.2 of BDS, Bidders shall have to quote all prices under Schedule 4 (Installation and other Services) in Bangladeshi Taka (BDT). However, if there is a specific requirement for quoting the price in foreign currency, then the bidder has to give proper justification while submitting the financial bid

Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREF), Package-2									
Section B L1/O of Sripur-Ashuganj 230KV double circuit Line at Monohardi 230/132/33KV Substation									
Item	Description	Unit	Quantity	Unit Price1		Total Price1		Local Currency Portion [BDT]	Foreign Currency Portion []
1	2	3	4	5	6	7=4x5	8=4x6		
Schedule No. 4B Installation and Other Services									
1	Survey and soil investigation works								
1.1	Survey Work								
1.1.1	Check survey in accordance with the requirements of the technical specification, incl. Full ground survey with change of route, if any, tower plotting and preparation and submission of route maps, submission of tower footing area on mouza maps for each tower location, profile drawings, SIMM documents, etc.	km	5.5						
1.2	Geotechnical Investigations incl. taking samples, logging and lab testing								
1.2.1	Boreholes for geotechnical investigation, incl. laboratory test, borehole logs, sampling and interpretive report as per geotechnical specification	borehole	1						
(a)	Level 2	borehole	1						
(b)	Level 4	unit	20						
1.2.2	Soil resistivity tests (one per tower)								
2	Foundations for towers including all setting out, Concrete, Reinforcement, Excavation, Pumping, Stub-Setting, Geotechnical Investigation (Level 2), Shuttering, Leveling, Timbering, supply & installation of foundation steelwork, Earthing Materials, Backfilling, approved Protective Coating & site clearing etc.								
2.1	Tower type "2DT60"								
2.1.1	Pile Foundation for Any Soil Category with Standard Chimney	per tower	1						
2.1.2	Pile Foundation for Any Soil Category with 2.0m Raised Chimney	per tower	1						
2.2	Tower type "2QL"								
2.2.1	Piled Foundation for Soil Category-2 with Standard Chimney	per tower	1						
2.2.2	Piled Foundation for Soil Category-3 with Standard Chimney	per tower	1						
2.2.3	Piled Foundation for Soil Category-4 with Standard Chimney	per tower	1						
2.2.4	Piled Foundation for Soil Category-2 with 2.0m Raised Chimney	per tower	1						
2.2.5	Piled Foundation for Soil Category-3 with 2.0m Raised Chimney	per tower	1						
2.2.6	Piled Foundation for Soil Category-4 with 2.0m Raised Chimney	per tower	1						
2.3	Tower type "2Q1"								
2.3.1	Pile Foundation for Any Soil Category with 2.0m Raised Chimney	per tower	1						
2.4	Tower type "2Q15"								
2.4.1	Pile Foundation for Any Soil Category with 2.0m Raised Chimney	per tower	1						
2.5	Tower type "2Q30"								
2.5.1	Pile Foundation for Any Soil Category with Standard Chimney	per tower	1						
2.5.2	Pile Foundation for Any Soil Category with 2.0m Raised Chimney	per tower	1						
2.6	Tower type "2QT6"								
2.6.1	Piled Foundation for Soil Category-2 with Standard Chimney	per tower	1						
2.6.2	Piled Foundation for Soil Category-3 with Standard Chimney	per tower	1						
2.6.3	Piled Foundation for Soil Category-4 with Standard Chimney	per tower	2						
2.6.4	Piled Foundation for Soil Category-2 with 2.0m Raised Chimney	per tower	1						
2.6.5	Piled Foundation for Soil Category-3 with 2.0m Raised Chimney	per tower	1						
2.6.6	Piled Foundation for Soil Category-4 with 2.0m Raised Chimney	per tower	2						

Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP), Package-2									
Section B LULO of Sripur-Ashuganj 230KV double circuit Line at Monohardi 230/132/33KV Substation									
Item	Description	Unit	Quantity	Unit Price1		Total Price1		Foreign Currency Portion []	
				Local Currency Portion [BDT]	Foreign Currency Portion []	Local Currency Portion [BDT]	Foreign Currency Portion []	7 = 4 x 5	8 = 4 x 6
1	2	3	4	5	6				
Schedule No. 4B Installation and Other Services									
8	Dismantling & Bypass								
8.1(a)	Dismantling of existing line section (including tower, conductor, insulator and other accessories) whichever is required for line in/out.	per span	2.00						
8.1(b)	Storing the dismantled materials at Power Grid store	per span	2.00						
8.2	By passing the required line section with ERS. ERS for by passing shall be collected from Power Grid store	per span	4.00						
8.3	Dismantling of by pass line after completing line in line out and storing the ERS of by pass line as Power Grid store	per span	4.00						
Total Columns 7 & 8 to be carried forward to Schedule No. 5 - Grand Summary									

Name of Bidder
Signature of Bidder

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2. Definition of route km: Route km is the transmission line distance between two terminal points in plan view. Route km is not cumulative sag and other electrical clearances, elevation differences etc. The Contractor shall incorporate all such extra costs in his unit rate.
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[Signature]

Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP).

Power Transmission Strengthening and Integration of Renewable Energy Project (PTSIREP), Package-2

Section C: (Monohardi-Bajitpur 132kV double circuit line)

Item	Description	Unit	Quantity (1)	Unit Price ¹		Total Price ¹	
				Foreign Currency Portion [] (2)	Local Currency Portion [BDT] (3)	Foreign [1] (1) x (2)	Local [BDT] (1) x (3)
5.3	One 7x3 25 galvanized steel earthwire including Compressed dead-ends, compression junction sleeves, suspension clamps, armour rods and dampers, Sagging and clipping, Earthing jumpers, warning spheres (if required)	route km	2.00				
6	Documentation						
6.1	Establishment of as-built drawings, manuals and all requested documents as per specifications	Lot	1				
7	Miscellaneous						
7.1	Transport of the material and equipment supplied from Employer's Country	lump sum	1				
7.2	Insurance of material and equipment supplied from Employer's Country during transport	lump sum	1				
7.3	Additional counterpoise earthing in accordance with requirement of the Technical specification	per meter	8				
7.4	Miscellaneous Rates for works certified by the Engineer in accordance with method of Payment						
(a)	Additional Excavation	cu.m	300				
(b)	Additional Concrete	cu.m	200				
(c)	Additional Reinforcement	kg	800				
(d)	Extra for surface resisting cement per cu.m of concrete	cu.m	25				
(e)	Additional Boring (500mm diameter)	rm	100				
(f)	Additional Boring (600mm diameter)	rm	100				
(g)	Additional Boring (750mm diameter)	rm	100				
(h)	Sand Filling	cu.m	100				
7.5	"Environmental Management & Monitoring Plan Implementation including Environmental Parameter Testing (as per EMP i.e., Monthly/ Quarterly) and Ecological study"	lump sum	1				
7.6	STI, STD and HIV/AIDS alleviation program	lump sum	1				
7.7	Payment for Compensation (For resettlement of affected people, dwelling/commercial structures, trees, crops etc. on the Right of Way and preparation of a sketch map for tower footing compensation as per employers requirement)	lump sum	1				
7.8	Tree plantation in 1:3 ratio for the ROW clearance as per EMP.	lump sum	1				
Total (to Schedule No. 5. Grand Summary)							

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