## **SCHEDULE OF RATES AND PRICES**

## LOT 3 MARSABIT – MOYALE & SAKU

	SCHEDULE NO. 1 - PLANT AND M	ANDATORY S			PLIED FRO	OM ABROAD	
Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Oty	CIP Unit Price <sup>1</sup>	CIP Total Price <sup>1</sup>
		single unit <sup>2</sup>			(1)	(2)	(1) x (2)
	DIRDIMA 30 kW	/p (30kW AC) :	SOLAR PV	/ MINI G	RID		
Α	Solar Power Generation Plant (SPGP)						
A1	SPV Modules & Inverters						
1	30 kWp (DC) Standard monocrystalline Silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	30 kW (AC) Solar PV Inverters			Lot	1		
4	25 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	75 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
АЗ	Diesel Generator						
8	25 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common gen-set controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		

13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.		Lot	1	
		DIRDIN	1A SUBT	TOTAL A	
В	Power Distribution Network (PDN)				
В1	3-phase and single-phase LV Distribution Line				
14	10M LV Concrete Pole (TSP/03/005-1)		No	70	
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/06/03022)		Set	70	
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)		Km	3.32	
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)		No	44	
18	LV Concrete stays- (Stay wire, stay block, stay rod)		No	40	
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)		No	4	
B2	Other PDN Items				
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)		М	30	
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)		М	1,860	
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)		М	75.6	
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)		No.	63	
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)		No.	63	

25 Ready Boards Complete With Modriting accessories (TSP/14/051)  1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet)  26 With wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.  Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and  27 end user installation such as insulators,  No. 63	
(galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.  Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and	
required for installation and commissioning of the single and three phase Distribution line for Mini Grid and	
binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis	
B3 11KV MV Distribution line	
28   12M MV Concrete Pole (TSP/03/005-1)   No   0	
29 14M MV Concrete Pole (TSP/03/005-1) No 0	
MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)	
75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)	
32 MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator) No 0	
MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)  No 0	
34 MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)  No 0	
B4 11KV Distribution Transformer	
35 11KV 50KVA transformer No 0	
11KV 50 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)  DIRDIMA SUBTOTAL B	
C Mandatory spares	
Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.	
DIRDIMA SUBTOTAL C	

		Quantity and			Qty	CIP Unit	CIP Total
Item	Description	capacity of	Code <sup>3</sup>	Unit⁴		Price <sup>1</sup>	Price <sup>1</sup>
	EL BOR 175 kWp	single unit <sup>2</sup>	COLAD D	/ MINII G	(1)	(2)	(1) x (2)
Α	Solar Power Generation Plant (SPGP)	(173KW AC)	SOLAK PI	/ WIINI C	IKID		
A1	SPV Modules & Inverters						
711	175 kWp (d.c.) Standard monocrystalline						
1	or polycrystalline silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	175 kW (a.c.) Solar PV Inverters			Lot	1		
4	130 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	438 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
A3	Diesel Generator						
8	130 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1		
			EL B	OR SUBT	OTAL A		
				5 5 5 1			<u> </u>

В	Power Distribution Network (PDN)			
В1	3-phase and single-phase LV Distribution Line			
14	10M LV Concrete Pole (TSP/03/005-1)	No	262	
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/03/022)	Se	t 262	
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Kr	n 13.86	
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	138	
18	LV Concrete stays- (Stay wire, stay block, stay rod)	No	172	
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)	No	23	
B2	Other PDN Items			
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	30	
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	M	10260	
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	M	411.6	
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No	o. 343	
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No	o. 343	
25	Ready Boards complete with mounting accessories (TSP/14/051)	No	. 343	
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.	No	343	
27	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis	Lo	t 1	
В3	11KV MV Distribution line			
28	12M MV Concrete Pole (TSP/03/005-1)	No	0	

29	14M MV Concrete Pole (TSP/03/005-1)		No	0	
30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/02/003-2), (TSP/02/003-2), (TSP/06/036-1), (TSP/03/002), (TSP/03/022)		Set	0	
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)		Km	0	
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)		No	0	
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)		No	0	
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)		No	0	
B4	11KV Distribution Transformer				
35	11KV 25KVA transformer		No	0	
36	11KV 25 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)		Set	0	
B5	Step up Transformer				
37	415V/11KV 50KVA transformer		No	0	
38	All system components for interconnecting the inverters and the 11kv distribution transformers, including but not limited to: panelboards, busbars, switchgears, air break switch and structure, 11kv solid links, surge diverters, mounting structures for the surge diverters, underground cabling, conduits, cables and cable trays, grounding electrodes, grounding conductors, lightning arrestors, lightning mast galvanized steel structure and associated earthing, insulators, meters, sensors, concrete plinth, auto-recloser, mounting structures for the HT neutral bushing and any other fixtures required for safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.	FI	Set B <b>OR</b> SUB	OTAL B	
		EL I	ROK 20R	IOIALB	
С	Mandatory spares		1		
39	Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.		Lot	1	

**EL BOR** SUBTOTAL C

Item	Description	Quantity and	Code <sup>3</sup>	Unit⁴	Qty	CIP Unit Price <sup>1</sup>	CIP Total Price <sup>1</sup>
	·	capacity of single unit <sup>2</sup>			(1)	(2)	(1) x (2)
	KARGI 160 kWp	(160kW AC) S	OLAR PV	MINI G	RID		
Α	Solar Power Generation Plant (SPGP)						
A1	SPV Modules & Inverters						
1	160 kWp (DC) Standard monocrystalline silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	160 kW (AC) Solar PV Inverters			Lot	1		
4	130 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	400 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
А3	Diesel Generator						
8	130 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1		
			KAR	<b>rgi</b> subt	OTAL A		

В	Power Distribution Network (PDN)			
В1	3-phase and single-phase LV Distribution			
	Line	N.	300	
14	10M LV Concrete Pole (TSP/03/005-1) LV Concrete Pole fittings-	No	300	
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/03/022)	Set	300	
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Km	17.77	
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	164	
18	LV Concrete stays- (Stay wire, stay block, stay rod)	No	175	
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)	No	10	
B2	Other PDN Items			
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	0	
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	6360	
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	М	254.4	
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No.	212	
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No.	212	
25	Ready Boards complete with mounting accessories (TSP/14/051)	No.	212	
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing	No	212	
27	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis	Lot	1	
В3	11KV MV Distribution line			
28	12M MV Concrete Pole (TSP/03/005-1)	No	27	

29	14M MV Concrete Pole (TSP/03/005-1)		No	6	
30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/02/003-2), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)		Set	33	
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)		Km	2.15	
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)		No	13	
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)		No	4	
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)		No	0	
B4	11KV Distribution Transformer				
35	11KV 50KVA transformer		No	2	
36	11KV 50 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)		Set	2	
B5	Step up Transformer				
37	415V/11KV 100KVA transformer		No	1	
38	All system components for interconnecting the inverters and the 11kv distribution transformers, including but not limited to: panelboards, busbars, switchgears, air break switch and structure, 11kv solid links, surge diverters, mounting structures for the surge diverters, underground cabling, conduits, cables and cable trays, grounding electrodes, grounding conductors, lightning arrestors, lightning mast galvanized steel structure and associated earthing, insulators, meters, sensors, concrete plinth, autorecloser, mounting structures for the HT neutral bushing and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.	KAI	Set	1 TOTAL B	
	Mandahara	KAI	KGI SUB	IOIALB	
С	Mandatory spares				
39	Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.		Lot	1	

**KARGI** SUBTOTAL C

Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Qty	CIP Unit Price <sup>1</sup>	CIP Total Price <sup>1</sup>
		single unit <sup>2</sup>			(1)	(2)	(1) x (2)
	BORI 135 kWp	(135kW AC) S	OLAR PV	MINI GI	RID		
Α	Solar Power Generation Plant (SPGP)						
A1	SPV Modules & Inverters						
1	135 kWp Standard monocrystalline or polycrystalline silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	135 kW Solar PV Inverters			Lot	1		
4	82 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	338 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
A3	Diesel Generator						
8	82 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1		

	BORI SUBTOTAL A				
В	Power Distribution Network (PDN)			•	
В1	3-phase and single-phase LV Distribution Line				
14	10M LV Concrete Pole (TSP/03/005-1)	No	263		
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/03/022)	Set	t 263		
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Kn	n 14.02		
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	167		
18	LV Concrete stays- (Stay wire, stay block, stay rod) LV Concrete strut pole- (Concrete strut	No	160		
19	pole, heavy duty clamps)	No	27		
B2	Other PDN Items				
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	<u>M</u>	30		
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	M	8,280		
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	М	332.4		
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No	. 277		
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No	277		
25	Ready Boards complete with mounting accessories (TSP/14/051)	No	. 277		
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.	No	277		
27	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis	Lo	t 1		
В3	11KV MV Distribution line				

28	12M MV Concrete Pole (TSP/03/005-1)	No	20	
29	14M MV Concrete Pole (TSP/03/005-1)	No	0	
30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)	Set	20	
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)	Km	1.09	
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)	No	4	
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)	No	0	
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)	No	0	
B4	11KV Distribution Transformer			
35	11KV 50KVA transformer	No	1	
36	structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)	Set	1	
B5	Step up Transformer			
37	415V/11KV 50KVA transformer	No	1	
38	All system components for interconnecting the inverters and the 11kv distribution transformers, including but not limited to: panelboards, busbars, switchgears, air break switch and structure, 11kv solid links, surge diverters, mounting structures for the surge diverters, underground cabling, conduits, cables and cable trays, grounding electrodes, grounding conductors, lightning arrestors, lightning mast galvanized steel structure and associated earthing, insulators, meters, sensors, concrete plinth, autorecloser, mounting structures for the HT neutral bushing and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.	Set	1	
		BORI SUB	TOTAL B	
С	Mandatory spares		<del>                                     </del>	
39	Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel	Lot	1	

capacity, fuses, cabling and hardware for 7 years including all consumable parts.					
	ВС	ori sub	TOTAL C		

Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Oty	CIP Unit Price <sup>1</sup>	CIP Total Price <sup>1</sup>	
		single unit <sup>2</sup>			(1)	(2)	(1) x (2)	
	FOROLLE 100 kWp (100kW AC) SOLAR PV MINI GRID							
Α	Solar Power Generation Plant (SPGP)							
A1	SPV Modules & Inverters							
1	100 kWp (DC) Standard monocrystalline silicon SPV modules			Lot	1			
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1			
3	100 kW (AC) Solar PV Inverters			Lot	1			
4	60 kW Battery Inverter			Lot	1			
A2	Battery Energy Storage System							
5	250 kWh Battery Energy Storage System (BESS)			Lot	1			
6	Battery Management System			Lot	1			
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1			
A3	Diesel Generator							
8	60 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1			
9	2000Litres Fuel Storage Tank			Lot	1			
A4	Other SPGP Items							
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1			
11	Auxiliary power supply as per specifications			Lot	1			
12	Air conditioners for the control room as per specifications.			Lot	1			
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1			
			FOROL	. <b>LE</b> SUBT	TOTAL A			

В	Power Distribution Network (PDN)		
В1	3-phase and single-phase LV Distribution		
	Line		
14	10M LV Concrete Pole (TSP/03/005-1)	No	150
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)	Set	150
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Km	8.31
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	96
18	LV Concrete stays- (Stay wire, stay block, stay rod)	No	107
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)	No	18
B2	Other PDN Items		
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	30
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	6750
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	М	271.2
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No.	226
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No.	226
25	Ready Boards complete with mounting accessories (TSP/14/051)	No.	226
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.	No	226
27 B3	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis  11KV MV Distribution line	Lot	1
		No	0
28	12M MV Concrete Pole (TSP/03/005-1)	No No	
29	14M MV Concrete Pole (TSP/03/005-1)	No	0

	NB – Refer to Employer's Requirements & Te Volumes II and IV)	chnical Specifications f	or detai	ls of each	item (Biddir	ng Documents
	for Low Voltage network.				•	•
	<sup>4</sup> Lot per km - Bidders are advised to assume a			-		1kV) and 50m
	<sup>3</sup> Bidders shall enter a code representing the c		nported	plant and	equipment.	
	item as well as the size/capacity of a single un		CCTIOITIC	ici oi sirigi	ic arms tricit i	nake up the
	<sup>2</sup> Bidder to provide further breakdown of item					
	<sup>1</sup> Specify currency. Create and use as many co		l Total P	rice as the	re are currer	ncies
		Signature of Bidder				
	•	Name of Bidder			1	
	TOTAL (to Schedule No. 7. G	rand Summary)				
	1			_	1	1
		FORO	L <b>LE</b> SUB	TOTAL C		
	fuses, cabling and hardware for 7 years including all consumable parts.					
37	inverter, 5% of total solar PV panel capacity,		Lot	1		
	Mandatory spares including at least 1 spare					
С	Mandatory spares					
		FORO	L <b>LE</b> SUB	TOTAL B		
	circuit plates, number plates, anti-climbing devices and other safety requirements)					
	clamps etc. Danger plates, phase plates,					
	Concrete poles, 11KV Steel channel and					
36	diverters, Overhead fuse carriers, 10M		Set	0		
	requirement, Expulsion Fuses, Surge					
	Protection and associated material					
	11KV 50 - 200KVA transformer substation structure and fittings (Earthing & lightning					
35	11KV 50KVA Transformer		No	0		
B4	11KV Distribution Transformer					
D.4	strut pole, heavy duty clamps)					
34	MV Concrete Pole strut pole – (Concrete		No	0		
33	pole, Stay wire, stay rod, stay block, shackle insulator)		No	0		
22	MV Concrete Pole flying stays - (Concrete		N.1 -			
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)		No	0		
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)		Km	0		
30	(TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)		Set	0		
20	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035),		C. t			

	Country of Origin Declaration Form								
Item Description Code Country									

	SCHEDULE NO. 2 - PLANT AND MANDATOR		3 I KOW	W 1 1 1 1 1 1 1 1	IIIL LIVII	LOTEKSCO	SINIKI
Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Qty	EXW Unit Price <sup>1</sup>	EXW Total Price <sup>1</sup>
		single unit <sup>2</sup>			(1)	(2)	(1) x (2)
	DIRDIMA 30 kWp	(30kW AC) SC	DLAR PV I	MINI GR	ID		
Α	Solar Power Generation Plant (SPGP)						
A1	SPV Modules & Inverters						
1	30 kWp (DC) Standard monocrystalline Silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	30 kW (AC) Solar PV Inverters			Lot	1		
4	25 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	75 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
A3	Diesel Generator						
8	25 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common gen-set controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support			Lot	1		

structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors,

lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and

compliance with all relevant local and

	international codes and standards at the time of installation.				
	Decree Distribution Not work (DDN)	ווטאוט	MY 20R	TOTAL A	
В	Power Distribution Network (PDN)  3-phase and single-phase LV Distribution				
B1	Line				
14	10M LV Concrete Pole (TSP/03/005-1)		No	70	
15	LV Concrete Pole fittings- (Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, D- irons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003- 2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)		Set	70	
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)		Km	3.32	
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)		No	44	
18	LV Concrete stays- (Stay wire, stay block, stay rod)		No	40	
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)		No	4	
B2	Other PDN Items				
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)		М	30	
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)		М	1,860	
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)		М	75.6	
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)		No.	63	
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)		No.	63	
25	Ready Boards complete with mounting accessories (TSP/14/051)		No.	63	
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for		No	63	

	meter & MCB mounting, Service cable entry and Earthing .				
27	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis		Lot	1	
В3	11KV MV Distribution line				
28	12M MV Concrete Pole (TSP/03/005-1)		No	0	
29	14M MV Concrete Pole (TSP/03/005-1)		No	0	
30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)		Set	0	
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)		Km	0	
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)		No	0	
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)		No	0	
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)		No	0	
B4	11KV Distribution Transformer				
35	11KV 50KVA transformer		No	0	
36	11KV 50 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)		Set	0	
		DIRE	DIMA SUB	TOTAL B	
С	Mandatory spares				
37	Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.		Lot	1	
		DIRE	DIMA SUB	TOTAL C	

Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Oty	EXW Unit Price <sup>1</sup>	EXW Total Price <sup>1</sup>
	EL BOR 175 kWp	single unit <sup>2</sup>		MINICE	(1)	(2)	(1) x (2)
_		173KW AC) 30	JLAK PV I	WIINI GR	שוא		
A A1	Solar Power Generation Plant (SPGP) SPV Modules & Inverters						
1	175 kWp (d.c.) Standard monocrystalline or polycrystalline silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	175 kW (a.c.) Solar PV Inverters			Lot	1		
4	130 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	438 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
A3	Diesel Generator						
8	130 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1		
			EL B	or subt	TOTAL A		
В	Power Distribution Network (PDN)						

В1	3-phase and single-phase LV Distribution Line			
14	10M LV Concrete Pole (TSP/03/005-1)	No	262	
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)	Set	262	
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Kn	n 13.86	
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	138	
18	LV Concrete stays- (Stay wire, stay block, stay rod)	No	172	
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)	No	23	
B2	Other PDN Items			
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	30	
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	10260	
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	М	411.6	
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No	. 343	
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No	. 343	
25	Ready Boards complete with mounting accessories (TSP/14/051)	No	. 343	
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.	No	343	
27	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis	Lo	t 1	
В3	11KV MV Distribution line			
28	12M MV Concrete Pole (TSP/03/005-1)	No		
29	14M MV Concrete Pole (TSP/03/005-1)	No.	0	

30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)		Set	0	
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)		Km	0	
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)		No	0	
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)		No	0	
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)		No	0	
B4	11KV Distribution Transformer				
35	11KV 25KVA transformer		No	0	
36	11KV 25 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)		Set	0	
B5	Step up Transformer				
37	415V/11KV 50KVA transformer		No	0	
38	All system components for interconnecting the inverters and the 11kv distribution transformers, including but not limited to: panelboards, busbars, switchgears, air break switch and structure, 11kv solid links, surge diverters, mounting structures for the surge diverters, underground cabling, conduits, cables and cable trays, grounding electrodes, grounding conductors, lightning arrestors, lightning mast galvanized steel structure and associated earthing, insulators, meters, sensors, concrete plinth, autorecloser, mounting structures for the HT neutral bushing and any other fixtures required for safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.		Set	0	
		EI.	ROR SLIB	TOTAL B	
			DOK JOB		
С	Mandatory spares		DOK 30B		
C 39	Mandatory spares  Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.		Lot BOR SUB	1	

Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Oty	EXW Unit Price <sup>1</sup>	EXW Total Price <sup>1</sup>
	KARGI 160 kWp (	single unit <sup>2</sup>	N A D DV / A	AINII CD	(1)	(2)	(1) x (2)
_		160KW ACJ SC	JLAK PV I	VIIIVI GK	טו		
A	Solar Power Generation Plant (SPGP)						
A1	SPV Modules & Inverters  160 kWp (DC) Standard monocrystalline						
1	silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	160 kW (AC) Solar PV Inverters			Lot	1		
4	130 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	400 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
А3	Diesel Generator						
8	130 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1		
		T	KAF	r <b>gi</b> subt	OTAL A		
В	Power Distribution Network (PDN)						

В1	3-phase and single-phase LV Distribution Line		
14	10M LV Concrete Pole (TSP/03/005-1)	No	300
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)	Set	300
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Km	17.77
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	164
18	LV Concrete stays- (Stay wire, stay block, stay rod)	No	175
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)	No	10
B2	Other PDN Items		
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	0
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	6360
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	М	254.4
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No.	212
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No.	212
25	Ready Boards complete with mounting accessories (TSP/14/051)	No.	212
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing	No	212
27	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis	Lot	1
В3	11KV MV Distribution line		
28	12M MV Concrete Pole (TSP/03/005-1)	No	27
29	14M MV Concrete Pole (TSP/03/005-1)	No	6

30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)		Set	33	
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)		Km	2.15	
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)		No	13	
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)		No	4	
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)		No	0	
B4	11KV Distribution Transformer				
35	11KV 50KVA transformer		No	2	
36	11KV 50 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)		Set	2	
B5	Step up Transformer				
37	415V/11KV 100KVA transformer		No	1	
38	All system components for interconnecting the inverters and the 11kv distribution transformers, including but not limited to: panelboards, busbars, switchgears, air break switch and structure, 11kv solid links, surge diverters, mounting structures for the surge diverters, underground cabling, conduits, cables and cable trays, grounding electrodes, grounding conductors, lightning arrestors, lightning mast galvanized steel structure and associated earthing, insulators, meters, sensors, concrete plinth, autorecloser, mounting structures for the HT neutral bushing and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.		Set	1	
		KA	RGI SUB	TOTAL B	
_				1	
С	Mandatory spares				
<b>C</b> 39	Mandatory spares  Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.		Lot	1 TOTAL C	

Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Oty	EXW Unit Price <sup>1</sup>	EXW Total Price <sup>1</sup>
		single unit <sup>2</sup>			(1)	(2)	(1) x (2)
	BORI 135 kWp (1	35kW AC) SO	LAR PV M	IINI GRII	D	ı	
Α	Solar Power Generation Plant (SPGP)						
A1	SPV Modules & Inverters						
1	135 kWp Standard monocrystalline or polycrystalline silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	135 kW Solar PV Inverters			Lot	1		
4	82 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	338 kWh Usable Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
A3	Diesel Generator						
8	82 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1		
			ВС	ori subt	TOTAL A		
	1					ı	

В	Power Distribution Network (PDN)		
B1	3-phase and single-phase LV Distribution		
ы	Line		
14	10M LV Concrete Pole (TSP/03/005-1)	No	263
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)	Set	263
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Km	14.02
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	167
18	LV Concrete stays- (Stay wire, stay block, stay rod)	No	160
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)	No	27
B2	Other PDN Items		
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	30
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	M	8,280
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	М	332.4
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No.	277
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No.	277
25	Ready Boards complete with mounting accessories (TSP/14/051)	No.	277
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.	No	277
27	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis	Lot	1
B3	11KV MV Distribution line		70
28	12M MV Concrete Pole (TSP/03/005-1)	No	20
29	14M MV Concrete Pole (TSP/03/005-1)	No	0

30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)  75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)	Set	20	
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)	No	4	
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)	No	0	
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)	No	0	
B4	11KV Distribution Transformer			
35	11KV 50KVA transformer	No	1	
36	11KV 50 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)	Set	1	
B5	Step up Transformer			
37	415V/11KV 50KVA transformer	No	1	
38	All system components for interconnecting the inverters and the 11kv distribution transformers, including but not limited to: panelboards, busbars, switchgears, air break switch and structure, 11kv solid links, surge diverters, mounting structures for the surge diverters, underground cabling, conduits, cables and cable trays, grounding electrodes, grounding conductors, lightning arrestors, lightning mast galvanized steel structure and associated earthing, insulators, meters, sensors, concrete plinth, autorecloser, mounting structures for the HT neutral bushing and any other fixtures required for a safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.	Set	1	
		BORI SUB	TOTAL B	
С	Mandatory spares			
C 39	Mandatory spares  Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.	Lot BORI SUB	1	

Item	Description	Quantity and capacity of	Code <sup>3</sup>	Unit⁴	Qty	EXW Unit Price <sup>1</sup>	EXW Total Price <sup>1</sup>
		single unit <sup>2</sup>			(1)	(2)	(1) x (2)
_	FOROLLE 100 kWp	(100kW AC) S	SOLAR PV	MINI G	RID		
Α	Solar Power Generation Plant (SPGP)						
A1	SPV Modules & Inverters						
1	100 kWp (DC) Standard monocrystalline silicon SPV modules			Lot	1		
2	Fixed-tilt racking structure(s) for above SPV modules including all necessary nuts and bolts as well as necessary clamps, foundation bolts etc.			Lot	1		
3	100 kW (AC) Solar PV Inverters			Lot	1		
4	60 kW Battery Inverter			Lot	1		
A2	Battery Energy Storage System						
5	250 kWh Battery Energy Storage System (BESS)			Lot	1		
6	Battery Management System			Lot	1		
7	Supply of SCADA along with associated equipment, data acquisition, data logger and display units and Industrial type PC with remote monitoring.			Lot	1		
А3	Diesel Generator						
8	60 kVA Prime Rated Diesel Generator(s) (DG) 415 V, 3-phase installed with a common genset controller capable of parallel operation with shunt-trip breakers for auto-start capability			Lot	1		
9	2000Litres Fuel Storage Tank			Lot	1		
A4	Other SPGP Items						
10	Metering system consisting of check and main meters for Import / export of energy from solar plant as per grid code			No.	1		
11	Auxiliary power supply as per specifications			Lot	1		
12	Air conditioners for the control room as per specifications.			Lot	1		
13	All balance of system components for interconnecting the battery and solar array with their inverters and the wider 415V three-phase 50 Hz AC distribution system, including but not limited to: AC & DC wiring, breakers, fuses, combiner boxes, recombiner boxes, panelboards, conduits, cables and cable trays, relays, transformers, enclosures, foundations, trenches, poles, support structures, cabinets, grounding electrodes, grounding conductors, lighting arrestors, lightning rods, insulators, surge protection, meters, sensors, and any other fixtures required for safety, reliability, and compliance with all relevant local and international codes and standards at the time of installation.			Lot	1		
		1	FOROL	LE SUBT	TOTAL A		
В	Power Distribution Network (PDN)						

В1	3-phase and single-phase LV Distribution Line			
14	10M LV Concrete Pole (TSP/03/005-1)	No	150	
15	LV Concrete Pole fittings-(Multipurpose/universal clamps, bolts,nuts,stays, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)	Set	150	
16	50sqmm AA bare conductor for length of LV (2-wire) line (TSP/06/020-2)	Km	8.31	
17	Complete Earthing- Protective Multiple Earthing (PME) (TSP/06/031-1)	No	96	
18	LV Concrete stays- (Stay wire, stay block, stay rod)	No	107	
19	LV Concrete strut pole- (Concrete strut pole, heavy duty clamps)	No	18	
B2	Other PDN Items			
20	Service Cable (25mm2 PVC Insulated three phase, 4 core Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	М	30	
21	Service Cable (16mm2 PVC Insulated Single Phase Concentric Aluminium Cable Without Two Core Copper Communication Cable) (TSP/05/004)	M	6750	
22	10mm dropper cable Red and Black; 1m each for single phase meters <sup>2</sup> (TSP/05/016)	М	271.2	
23	Service cable concrete fittings (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/03/003), (TSP/06/035)	No.	226	
24	Service Cable fittings for wall mounting including Angle Iron (TSP/02/003-3), (TSP/04/011), (TSP/03/003), (TSP/02/003-1)	No.	226	
25	Ready Boards complete with mounting accessories (TSP/14/051)	No.	226	
26	1ftX1ftX3/4ft metallic meter boards (galvanized gauge 30 plain iron sheet) with wall mounting accessories and suitable for meter & MCB mounting, Service cable entry and Earthing.	No	226	
27 B3	Other Items not Mentioned above but required for installation and commissioning of the single and three phase Distribution line for Mini Grid and end user installation such as insulators, binding wires, fittings including nuts, bolts, Danger Plates, Name Plates, anti-climbing Barbed wire and accessories etc. on turn-key basis  11KV MV Distribution line	Lot	1	
-		No	0	
28	12M MV Concrete Pole (TSP/03/005-1)	No	0	
29	14M MV Concrete Pole (TSP/03/005-1)	No	0	

30	MV Concrete Pole fittings- (Cross arms, Tie straps, insulator composites, Universal clamps, bolts, nuts, preformed guy-grips, Dirons, insulators, etc) (TSP/06/035), (TSP/03/021), (TSP/03/003), (TSP/02/004), (TSP/02/003-1), (TSP/04/011), (TSP/02/003-2), (TSP/02/002), (TSP/06/036-1), (TSP/07/001), (TSP/03/022)		Set	0		
31	75sqmm Aluminium Conductor Steel Reinforced (ACSR) conductor for length of three phase (3 - wire) line (TSP/06/020-2)		Km	0		
32	MV Concrete Pole stays - (Stay wire, stay rod, stay block, shackle insulator)		No	0		
33	MV Concrete Pole flying stays - (Concrete pole, Stay wire, stay rod, stay block, shackle insulator)		No	0		
34	MV Concrete Pole strut pole – (Concrete strut pole, heavy duty clamps)		No	0		
B4	11KV Distribution Transformer					
35	11KV 50KVA Transformer		No	0		
36	11KV 50 - 200KVA transformer substation structure and fittings (Earthing & lightning Protection and associated material requirement, Expulsion Fuses, Surge diverters, Overhead fuse carriers, 10M Concrete poles, 11KV Steel channel and clamps etc. Danger plates, phase plates, circuit plates, number plates, anti-climbing devices and other safety requirements)		Set	0		
		FO	ROLLE SUB	TOTAL B		
С	Mandatory spares					·
37	Mandatory spares including at least 1 spare inverter, 5% of total solar PV panel capacity, fuses, cabling and hardware for 7 years including all consumable parts.		Lot	1		
		FOI	ROLLE SUB	TOTAL C		
	TOTAL (to Schedule No. 7. G					
		Name of Bidd	ler			
		Signature of Bidd	ler			
	<sup>1</sup> Specify currency. Create and use as many co	lumns for Unit Price	and Total P	rice as the	re are curren	icies.
	<sup>2</sup> Bidder to provide further breakdown of item	ns quoted for i.e. the				
	item as well as the size/capacity of a single ur					41.0
	<sup>3</sup> Lot per km - Bidders are advised to assume a for Low Voltage network.	span length of 100r	n tor Mediu	ım Voltage	e network (1	IKV) and 50m
	NB – Refer to Employer's Requirements & Te Volumes II and IV)	echnical Specification	ns for detai	ls of each	item (Biddin	g Documents

	SCHEDULE NO. 3 - SURVEY & DESIGN SERVICES						
	LOT 3 SOLAR PV MINIGRIDS						
Item	Description	Unit	Qty	Unit Price <sup>1</sup>	Total Price <sup>1</sup>		
			(1)	(2)	(1) x (2)		
1	Survey and Design of SPV Modules & Inverters including structures	Lot	5				
2	Design of Battery Energy Storage System, including Inverter/Charger	Lot	5				
3	SCADA system design	Lot	5				
4	Diesel Generator Design	Lot	5				
5	Design of other SPGP items	Lot	5				
6	Survey and Design of Power Distribution Network	Lot	5				
7	Design of other PDN items	Lot	5				
8	Design of Civil/Structural works and associated works	Lot	5				
	Lot 3 SUBTOTAL						
	TOTAL (to Schedule No. 7. Grand	d Summary)					
		Name of	Bidder				
		Signature of	Bidder				

<sup>&</sup>lt;sup>1</sup> Specify currency in accordance with specifications in Bid Data Sheet under ITB 18.1

NB – Refer to Employer's Requirements & Technical Specifications for details of each item (Bidding Documents Volumes II and IV)

The design costs should include Survey (including picking distance of the solar plant from the existing KPLC grid), premises picking, customer sensitization, customer data collection, transformer positioning/picking, LV line wayleaves consent acquisition, and detailed design including design proposals/information updating on the KPLC Facility Data Base (FDB), preparation and submission of drawings. The civil and structural works design shall include Geotechnical Survey, Topographical Survey, hydrogeological survey and all Designs and drawings submission and all statutory approvals.

	SCHEDULE NO. 4 - INSTALLATION, TESTING, COM	MISSION	NING AND	OTHER SERVICES	5
Item	Description	Unit <sup>2</sup>	Oty	Unit Price 1	Total Price 1
		OLAR DV	(1)	(2)	(1) x (2)
Α	DIRDIMA 30 kWp (30 kW AC) Solar Power Generation Plant (SPGP)	JLAK PV	MINI GRID		
	. ,				
1	Installation, Erection, Testing and Commissioning of SPV Modules & Inverters including Mounting structures		1		
2	Installation, Erection, Testing and Commissioning of Battery Energy Storage System, including Inverter/Charger	Lot	1		
3	Installation, Erection, Testing and Commissioning of SCADA system	Lot	1		
4	Installation, Erection, Testing and Commissioning of Diesel Generator	Lot	1		
5	Installation of all balance of system components to complete erection of the SPGP	Lot	1		
6	Testing & commissioning of all supplied equipment including DG. Test running of Solar Power Plant as well as load trials at site, prior to handover and implementation of maintenance contract	Lot	1		
	DIRD	<b>IMA</b> SUB	TOTAL A		
В	Power Distribution Network				
B-1	Pegging, Erection, dressing and stringing of LV lines- 3 phase lines and Single phase lines				
7	Pole Erection and dressing- Concrete	No	70		
8	Conductor Stringing including trace clearance as per KPLC standard	Km	3.32		
9	PME installation	No	44		
10	LV Stay hole digging, making & Erection	No	40		
11	LV Strut hole digging, making & Erection	No	4		
B-2	Service cable				
12	Service cable installation complete with terminations on both the pole and angle iron on the wall, pole mounted meter box, Prepaid meter and MCB installation	No.	63		
13	Installation of Ready Boards, Earthing and Testing	No.	63		
14	Installation of wall mounted metallic customer meter boards complete with MCB and service cable termination	No.	63		
15	Class C-2 ERC Wiring Certificates	No	63		
B-3	Pegging, Erection, dressing and stringing of 11KV MV Distribution line				
16	Pole Erection and dressing- Concrete	No	0		
17	Conductor Stringing including trace clearance as per KPLC standard	Km	0		
18	MV Stay hole digging, making & Erection	No	0		
19	MV Flying Stay hole digging, making & Erection	No	0		
20	MV Strut hole digging, making & Erection	No	0		
B-4	Mounting, Dressing, Welding and Earthing 11KV Distribution Transformer				
21	Transformer Mounting, Dressing, Welding and Earthing	No	0		

	DIRD	IMA SUB	TOTAL B	
С	Civil works			
22	Platform Works-Earthworks and slope protection, site clearing and disposal, Galvanised Boundary chain link fence with steel posts for the entire minigrid developed area, Gates, SPGP area barricade fence. Solar panels reinforced concrete foundations/helical anchor foundations, Generator Equipment Plinth, 2000L underground fuel storage tank, Access road, SPGP Internal road, Storm water drainage.	Lot	1	
23	Cable network and conduits	Lot	1	
24	Containerized technology solution for Office Building and Control Room, Air conditioners.		1	
25	Galvanized Steel Structures- solar panels steel support structurers.	Lot	1	
26	Masonry guard house	Lot	1	
27	Masonry twin VIP Pit Latrine	Lot	1	
28	Security Systems, SPGP Outdoor Lighting and Perimeter Lighting, Control room and office building security lighting, Guard House Alarm System and danger and warning plate.		1	
29	Rain water harvesting and Storage	Lot	1	
30	Fire Prevention System-Fire Extinguishers, and Fire Suppression System at the BESS Section.		1	
	DIRD	<b>IMA</b> SUB	TOTAL C	

ltem	Description		Qty	Unit Price <sup>1</sup>	Total Price <sup>1</sup>
			(1)	(2)	(1) x (2)
	EL BOR 175 kWp (175 kW AC) S	OLAR PV	MINI GRIE		
Α	Solar Power Generation Plant (SPGP)				
1	Installation, Erection, Testing and Commissioning of SPV Modules & Inverters including Mounting structures	Lot	1		
2	Installation, Erection, Testing and Commissioning of Battery Energy Storage System, including Inverter/Charger	Lot	1		
3	Installation, Erection, Testing and Commissioning of SCADA system	Lot	1		
4	Installation, Erection, Testing and Commissioning of Diesel Generator	Lot	1		
5	Installation of all balance of system components to complete erection of the SPGP	Lot	1		
6	Testing & commissioning of all supplied equipment including DG. Test running of Solar Power Plant as well as load trials at site, prior to handover and implementation of maintenance contract	Lot	1		
		BOR SUB	TOTAL A		
В	Power Distribution Network				
B-1	Pegging, Erection, dressing and stringing of LV lines- 3 phase lines and Single phase lines				
7	Pole Erection and dressing- Concrete	No	262		
8	Conductor Stringing including trace clearance as per KPLC standard	Km	13.86		
9	PME installation	No	138		
10	LV Stay hole digging, making & Erection	No	172		
11	LV Strut hole digging, making & Erection	No	23		
B-2	Service cable				
12	Service cable installation complete with terminations on both the pole and angle iron on the wall, pole mounted meter box, Prepaid meter and MCB installation	No.	343		
13	Installation of Ready Boards, Earthing and Testing	No.	343		
14	Installation of wall mounted metallic customer meter boards complete with MCB and service cable termination	No.	343		
15	Class C-2 ERC Wiring Certificates	No	343		
B-3	Pegging, Erection, dressing and stringing of 11KV MV Distribution line				
16	Pole Erection and dressing- Concrete	No	0		
17	Conductor Stringing including trace clearance as per KPLC standard	Km	0		
18	MV Stay hole digging, making & Erection	No	0		
19	MV Flying Stay hole digging, making & Erection	No	0		
20	MV Strut hole digging, making & Erection	No	0		
B-4	Mounting, Dressing, Welding and Earthing 11KV Distribution Transformer				
21	Transformer Mounting, Dressing, Welding and Earthing	No	0		
		BOR SUBT	TOTAL B		

С	Civil works			
22	reinforced concrete foundations/helical anchor foundations, Generator Equipment Plinth, 2000L underground fuel storage tank, Access road, SPGP Internal road, Storm water drainage.		1	
23	Cable network and conduits	Lot	1	
24	Containerized technology solution for Office Building and Control Room, Air conditioners.		1	
25	Galvanized Steel Structures- solar panels steel support structurers.	Lot	1	
26	Masonry guard house	Lot	1	
27	Masonry twin VIP Pit Latrine	Lot	1	
28	Security Systems, SPGP Outdoor Lighting and Perimeter		1	
29	Rain water harvesting and Storage	Lot	1	
30	Fire Prevention System-Fire Extinguishers, and Fire		1	
	EL	BOR SUB	TOTAL C	

Item	Description		Qty	Unit Price 1	Total Price <sup>1</sup>
			(1)	(2)	(1) x (2)
	KARGI 160 kWp (160 kW AC) SC	OLAR PV	MINI GRID		
Α	Solar Power Generation Plant (SPGP)				
1	Installation, Erection, Testing and Commissioning of SPV Modules & Inverters including Mounting structures	Lot	1		
2	Installation, Erection, Testing and Commissioning of Battery Energy Storage System, including Inverter/Charger	Lot	1		
3	Installation, Erection, Testing and Commissioning of SCADA system	Lot	1		
4	Installation, Erection, Testing and Commissioning of Diesel Generator	Lot	1		
5	Installation of all balance of system components to complete erection of the SPGP	Lot	1		
6	Testing & commissioning of all supplied equipment including DG. Test running of Solar Power Plant as well as load trials at site, prior to handover and implementation of maintenance contract	Lot	1		
	KA	<b>Argi</b> sub	TOTAL A		
В	Power Distribution Network				
B-1	Pegging, Erection, dressing and stringing of LV lines- 3 phase lines and Single phase lines				
7	Pole Erection and dressing- Concrete	No	300		
8	Conductor Stringing including trace clearance as per KPLC standard	Km	17.77		
9	PME installation	No	164		
10	LV Stay hole digging, making & Erection	No	175		
11	LV Strut hole digging, making & Erection	No	10		
B-2	Service cable				
12	Service cable installation complete with terminations on both the pole and angle iron on the wall, pole mounted meter box, Prepaid meter and MCB installation	No.	212		
13	Installation of Ready Boards, Earthing and Testing	No.	212		
14	Installation of wall mounted metallic customer meter boards complete with MCB and service cable termination	No.	212		
15	Class C-2 ERC Wiring Certificates	No	212		
B-3	Pegging, Erection, dressing and stringing of 11KV MV Distribution line				
16	Pole Erection and dressing- Concrete	No	33		
17	Conductor Stringing including trace clearance as per KPLC standard	Km	2.15		
18	MV Stay hole digging, making & Erection	No	13		
19	MV Flying Stay hole digging, making & Erection	No	4		
20	MV Strut hole digging, making & Erection	No	0		
B-4	Mounting, Dressing, Welding and Earthing 11KV Distribution Transformer				
21	Transformer Mounting, Dressing, Welding and Earthing	No	2		

B-5	Mounting, Dressing, Welding and Earthing Step up Transformer			
22	Transformer Mounting, Dressing, Welding and Earthing	No	1	
	K/	<b>argi</b> sub	TOTAL B	
C	Civil works			
23	Platform Works-Earthworks and slope protection, site clearing and disposal, Galvanised Boundary chain link fence with steel posts for the entire minigrid developed area, Gates, SPGP area barricade fence. Solar panels reinforced concrete foundations/helical anchor foundations, Generator Equipment Plinth, 2000L underground fuel storage tank, Access road, SPGP Internal road, Storm water drainage.		1	
24	Cable network and conduits	Lot	1	
25	Containerized technology solution for Office Building and Control Room, Air conditioners.	Lot	1	
26	Galvanized Steel Structures- solar panels steel support structurers.	Lot	1	
27	Masonry guard house	Lot	1	
28	Masonry twin VIP Pit Latrine	Lot	1	
29	Security Systems, SPGP Outdoor Lighting and Perimeter Lighting, Control room and office building security lighting, Guard House Alarm System and danger and warning plate.		1	
30	Rain water harvesting and Storage	Lot	1	
31	Fire Prevention System-Fire Extinguishers, and Fire Suppression System at the BESS Section.		1	
	KA	<b>ARGI</b> SUB	TOTAL C	

Item	Description		Oty	Unit Price 1	Total Price <sup>1</sup>
			(1)	(2)	(1) x (2)
	BORI 135kWp (135 kW AC) SO	LAR PV N	MINI GRID		
Α	Solar Power Generation Plant (SPGP)				
1	Installation, Erection, Testing and Commissioning of SPV Modules & Inverters including Mounting structures	Lot	1		
2	Installation, Erection, Testing and Commissioning of Battery Energy Storage System, including Inverter/Charger	Lot	1		
3	Installation, Erection, Testing and Commissioning of SCADA system	Lot	1		
4	Installation, Erection, Testing and Commissioning of Diesel Generator	Lot	1		
5	Installation of all balance of system components to complete erection of the SPGP	Lot	1		
6	Testing & commissioning of all supplied equipment including DG. Test running of Solar Power Plant as well as load trials at site, prior to handover and implementation of maintenance contract	Lot	1		
	E	<b>BORI</b> SUB	TOTAL A		
В	Power Distribution Network				
B-1	Pegging, Erection, dressing and stringing of LV lines- 3 phase lines and Single phase lines				
7	Pole Erection and dressing- Concrete	No	263		
8	Conductor Stringing including trace clearance as per KPLC standard	Km	14.02		
9	PME installation	No	167		
10	LV Stay hole digging, making & Erection	No	160		
11	LV Strut hole digging, making & Erection	No	27		
B-2	Service cable				
12	Service cable installation complete with terminations on both the pole and angle iron on the wall, pole mounted meter box, Prepaid meter and MCB installation	No.	277		
13	Installation of Ready Boards, Earthing and Testing	No.	277		
14	Installation of wall mounted metallic customer meter boards complete with MCB and service cable termination	No.	277		
15	Class C-2 ERC Wiring Certificates	No	277		
B-3	Pegging, Erection, dressing and stringing of 11KV MV Distribution line				
16	Pole Erection and dressing- Concrete	No	20		
17	Conductor Stringing including trace clearance as per KPLC standard	Km	1.09		
18	MV Stay hole digging, making & Erection	No	4		
19	MV Flying Stay hole digging, making & Erection	No	0		
20	MV Strut hole digging, making & Erection	No	0		
B-4	Mounting, Dressing, Welding and Earthing 11KV Distribution Transformer				
21	Transformer Mounting, Dressing, Welding and Earthing	No	1		

B-5	Mounting, Dressing, Welding and Earthing Step up Transformer			
22	Transformer Mounting, Dressing, Welding and Earthing	No	1	
		<b>BORI</b> SUB	TOTAL B	
С	Civil works			
23	Platform Works-Earthworks and slope protection, site clearing and disposal, Galvanised Boundary chain link fence with steel posts for the entire minigrid developed area, Gates, SPGP area barricade fence. Solar panels reinforced concrete foundations/helical anchor foundations, Generator Equipment Plinth, 2000L underground fuel storage tank, Access road, SPGP Internal road, Storm water drainage.		1	
24	Cable network and conduits	Lot	1	
25	Containerized technology solution for Office Building and Control Room, Air conditioners.	Lot	1	
26	Galvanized Steel Structures- solar panels steel support structurers.	Lot	1	
27	Masonry guard house	Lot	1	
28	Masonry twin VIP Pit Latrine	Lot	1	
29	Security Systems, SPGP Outdoor Lighting and Perimeter Lighting, Control room and office building security lighting, Guard House Alarm System and danger and warning plate.		1	
30	Rain water harvesting and Storage	Lot	1	
31	Fire Prevention System-Fire Extinguishers, and Fire Suppression System at the BESS Section.	Lot	1	
	<b>BORI</b> SUBTOTAL C			

	FOROLLE 100 PAY (* (100 PAY A C) COL		(1)	(2)	(1) x (2)
	FOROLLE 100 kWp (100 kW AC)	SOLAR P\	/ MINI GRI	D	
	Solar Power Generation Plant (SPGP)				
	Installation, Erection, Testing and Commissioning of SPV Modules & Inverters including Mounting structures	Lot	1		
	Installation, Erection, Testing and Commissioning of Battery Energy Storage System, including Inverter/Charger		1		
	Installation, Erection, Testing and Commissioning of SCADA system	Lot	1		
	Installation, Erection, Testing and Commissioning of Diesel Generator	Lot	1		
	Installation of all balance of system components to complete erection of the SPGP	Lot	1		
6	Testing & commissioning of all supplied equipment including DG. Test running of Solar Power Plant as well as load trials at site, prior to handover and implementation of maintenance contract	Lot	1		
	FORC	<b>ILLE</b> SUB	TOTAL A		
В	Power Distribution Network				
	Pegging, Erection, dressing and stringing of LV lines- 3 phase lines and Single phase lines				
7	Pole Erection and dressing- Concrete	No	150		
	Conductor Stringing including trace clearance as per KPLC standard	Km	8.31		
9	PME installation	No	96		
10	LV Stay hole digging, making & Erection	No	107		
11	LV Strut hole digging, making & Erection	No	18		
B-2	Service cable				
12	Service cable installation complete with terminations on both the pole and angle iron on the wall, pole mounted meter box, Prepaid meter and MCB installation	No.	226		
13	Installation of Ready Boards, Earthing and Testing	No.	226		
14	Installation of wall mounted metallic customer meter boards complete with MCB and service cable termination	No.	226		
15	Class C-2 ERC Wiring Certificates	No	226		
	Pegging, Erection, dressing and stringing of 11KV MV Distribution line				
16	Pole Erection and dressing- Concrete	No	0		
	Conductor Stringing including trace clearance as per KPLC standard	Km	0		
18	MV Stay hole digging, making & Erection	No	0		
19	MV Flying Stay hole digging, making & Erection	No	0		
20	MV Strut hole digging, making & Erection	No	0		
	Mounting, Dressing, Welding and Earthing 11KV Distribution Transformer				
21	Transformer Mounting, Dressing, Welding and Earthing	No	0		
	FORC	<b>DLLE</b> SUB	TOTAL B		

С	Civil works				
22	Platform Works-Earthworks and slope protection, site clearing and disposal, Galvanised Boundary chain link fence with steel posts for the entire minigrid developed area, Gates, SPGP area barricade fence. Solar panels reinforced concrete foundations/helical anchor foundations, Generator Equipment Plinth, 2000L underground fuel storage tank, Access road, SPGP Internal road, Storm water drainage.	Lot	1		
23	Cable network and conduits	Lot	1		
24	Containerized technology solution for Office Building and Control Room, Air conditioners.	Lot	1		
25	Galvanized Steel Structures- solar panels steel support structurers.	Lot	1		
26	Masonry guard house	Lot	1		
27	Masonry twin VIP Pit Latrine	Lot	1		
28	Security Systems, SPGP Outdoor Lighting and Perimeter Lighting, Control room and office building security lighting, Guard House Alarm System and danger and warning plate.	Lot	1		
29	Rain water harvesting and Storage	Lot	1		
30	Fire Prevention System-Fire Extinguishers, and Fire Suppression System at the BESS Section.	Lot	1		
	FORG	<b>DLLE</b> SUBT	TOTAL C		
D	Others				
_	Cost allocation for end-of-life (EOL) plan for all batteries				
31	and other potentially hazardous e-waste at the end of its useful life	Lot	1		
31		Lot Site	5		
	useful life Offices facilities: Provide a furnished site office complete with communication facilities (Laptop, internet, printer		•		
32	useful life Offices facilities: Provide a furnished site office complete with communication facilities( Laptop, internet, printer and stationery)	Site	5		
32	useful life  Offices facilities: Provide a furnished site office complete with communication facilities( Laptop, internet, printer and stationery)  Provision of communication facilities for the employer  Provision of Transport: Provide fuel and maintain with driver transport for exclusive use of the REREC project engineer for project supervision and coordination services	Site  Lot  Vehicl e/Mon	5		
32 33 34	useful life  Offices facilities: Provide a furnished site office complete with communication facilities (Laptop, internet, printer and stationery)  Provision of communication facilities for the employer  Provision of Transport: Provide fuel and maintain with driver transport for exclusive use of the REREC project engineer for project supervision and coordination services (1 No. 4X4)	Site  Lot  Vehicl e/Mon ths  Lumps	5 1 12	KSh. 1,000,000	KSh. 5,000,000
32 33 34 35	useful life  Offices facilities: Provide a furnished site office complete with communication facilities( Laptop, internet, printer and stationery)  Provision of communication facilities for the employer  Provision of Transport: Provide fuel and maintain with driver transport for exclusive use of the REREC project engineer for project supervision and coordination services (1 No. 4X4)  Factory Acceptance Tests for Major Items  Provisional sum for Community Project for compensation in kind for land acquisition (The project to be decided after	Site  Lot  Vehicl e/Mon ths  Lumps um  Fixed amou	5 1 12	KSh. 1,000,000	KSh. 5,000,000
32 33 34 35	useful life  Offices facilities: Provide a furnished site office complete with communication facilities( Laptop, internet, printer and stationery)  Provision of communication facilities for the employer  Provision of Transport: Provide fuel and maintain with driver transport for exclusive use of the REREC project engineer for project supervision and coordination services (1 No. 4X4)  Factory Acceptance Tests for Major Items  Provisional sum for Community Project for compensation in kind for land acquisition (The project to be decided after land value is determined)	Site  Lot  Vehicl e/Mon ths  Lumps um  Fixed amou nt  SUBTO TAL D	5 1 12	KSh. 1,000,000	KSh. 5,000,000
32 33 34 35	useful life  Offices facilities: Provide a furnished site office complete with communication facilities( Laptop, internet, printer and stationery)  Provision of communication facilities for the employer  Provision of Transport: Provide fuel and maintain with driver transport for exclusive use of the REREC project engineer for project supervision and coordination services (1 No. 4X4)  Factory Acceptance Tests for Major Items  Provisional sum for Community Project for compensation in kind for land acquisition (The project to be decided after	Site  Lot  Vehicl e/Mon ths  Lumps um  Fixed amou nt  SUBTO TAL D	5 1 12 1 5	KSh. 1,000,000	KSh. 5,000,000
32 33 34 35	useful life  Offices facilities: Provide a furnished site office complete with communication facilities( Laptop, internet, printer and stationery)  Provision of communication facilities for the employer  Provision of Transport: Provide fuel and maintain with driver transport for exclusive use of the REREC project engineer for project supervision and coordination services (1 No. 4X4)  Factory Acceptance Tests for Major Items  Provisional sum for Community Project for compensation in kind for land acquisition (The project to be decided after land value is determined)	Site  Lot  Vehicle/Months  Lumps um  Fixed amount SUBTO TAL D  Immary)  Name of	5 1 12 1 5		KSh. 5,000,000

<sup>&</sup>lt;sup>1</sup> Specify currency in accordance with ITB 18. Create and use as many columns for Unit Price and Total Price as there are currencies.

<sup>&</sup>lt;sup>2</sup> Lot per km - Bidders are advised to assume a span length of 100m for Medium Voltage network (11kV) and 50m for Low Voltage network.

	SCHEDULE NO. 5 - ENVIRON	MENTA	AL, SOCIA	L, HEALTH A	ND SAFETY	ESHS) SERVICES	
			Qty	Unit I	Price <sup>1</sup>	Total	Price <sup>1</sup>
ltem	Description	Unit	(Sites)	Foreign Currency Portion	Local Currency Portion	Foreign	Local
			(1)	(2)	(3)	(1) X (2)	(1) X (3)
	Air Quality: Dust and exhaust emission	าร				<u> </u>	
1	Sprinkle water to minimize dust generation	Lot	5				
2	Enclose/ cover/ water stockpiles of excavated soil during dry or windy conditions	Lot	5				
3	Conduct air quality measurements on a monthly basis	Lot	5				
	Solid Waste generation						
4	Provide proper facilities for holding, separating and storing waste to reduce exposure and damage by elements of weather	Lot	5				
5	Contract NEMA registered waste handlers to dispose, hazardous, obsolete and E-waste and contaminated soil	Lot	5				
6	Store hazardous products and wastes separately in well labelled containers	Lot	5				
	Noise and Vibration						
7	Conduct noise measurements on a monthly basis	Lot	5				
	Vegetation disturbance	1					
8	Plant and nurture (200) indigenous trees in selected areas in public/community institutions	Lot	5				
	Fire hazards	I		T	ı	T	
9	Designate smoking zone, fire assembly point and provide appropriate firefighting equipment	Lot	5				
10	Provide trained fire marshals	Lot	5				
	Traffic congestion & damage to roads	and ot	her existi	ng infrastruct	ture		
11	Provide traffic marshals and signages	Lot	5				
	Occupational safety and Health risks						
12	Awareness creation and training of staff on occupation health and safety issues	Lot	5				
13	Provide appropriate PPEs including Helmets, Safety Boots, Overalls, Dust Coats, Ear Muffs, Safety Harness, Gloves, Safety Glasses, etc	Lot	5				
14	Provide fully stocked first aid kit	Lot	5				
15	Provide insurance to the workers as per Work Injury and Benefits Act (WIBA) requirements	Lot	5				

16	Proper barricading and hazard communication and signage	Lot	5									
	Training and Sensitization on Labour influx related impacts (Gender based violence)-Sexual abuse and exploitation and sexual harassment, HIV/AIDs, Alcohol and drugs abuse and crime											
17	Awareness creation to the workers and members of public on Abstinence, Being Faithful and Use of Condoms to prevent HIV/AIDs spread.	Lot	5									
18	Install information on the site billboard - 'Beware of HIV/AIDs, it's real, it kills' and other posters around site	Lot	5									
19	Provide adequate condoms at convenient locations	Lot	5									
	Risks related to spread of COVID-19 to	worke	ers and lo	cals								
20	Install hand washing facilities with adequate running water and soap	Lot	5									
21	Use thermal guns for everyone entering the site for monitoring temperatures levels	Lot	5									
	Stakeholder Engagement											
22	Conduct stakeholder engagement forums in a culturally appropriate manner	Lot	5									
23	Conduct separate adequate public consultation for the VMGs where applicable	Lot	5									
		AL (To	Schedule	No. 7. Gran	d Summary)							
				Name of Bio	dder							
				Signature o	f Bidder							
	<sup>1</sup> Specify currency in accordance with IT	B 18. C	reate and	d use as many	columns for	Unit Price and To	otal Price as					
	there are currencies.											
	NB – For details of each item, refer to the Environmental, Social, Health and Safety Management Plan for proposed solar mini-grid for community facilities, enterprises, and households - Component 1 of the Kenya Offgrid Solar Access Project (Bidding Document Volume I)											

SCHEDULE NO. 6 - OPERATION & MAINTENANCE								
				% of	Unit Price <sup>1</sup>			
lte m	Description	Unit	Qty	O&M Contract Price	Local Currency Portion	Foreign Currency Portion	Total Price <sup>1</sup>	
	DIRDIMA 30kWp (30kW AC) SOLAR PV MINI C	- RID				(optional)		
	Operation and Maintenance of the							
1	Distribution Network and Plant Facility for FIRST YEAR	Year	1	11.5				
2	Operation and Maintenance of the Distribution Network and Plant Facility for SECOND YEAR	Year	1	11.5				
3	Operation and Maintenance of the Distribution Network and Plant Facility for THIRD YEAR	Year	1	11.5				
4	Operation and Maintenance of the Distribution Network and Plant Facility for FOURTH YEAR	Year	1	11.5				
5	Operation and Maintenance of the Distribution Network and Plant Facility for FIFTH YEAR	Year	1	18				
6	Operation and Maintenance of the Distribution Network and Plant Facility for SIXTH YEAR	Year	1	18				
7	Operation and Maintenance of the Distribution Network and Plant Facility for SEVENTH YEAR	Year	1	18				
			S	UBTOTAL A				
	EL BOR 175 kWp (175kW AC) SOLAR PV MINI GRID							
1	Operation and Maintenance of the Distribution Network and Plant Facility for FIRST YEAR	Year	1	11.5				
2	Operation and Maintenance of the Distribution Network and Plant Facility for SECOND YEAR	Year	1	11.5				
3	Operation and Maintenance of the Distribution Network and Plant Facility for THIRD YEAR	Year	1	11.5				
4	Operation and Maintenance of the Distribution Network and Plant Facility for FOURTH YEAR	Year	1	11.5				
5	Operation and Maintenance of the Distribution Network and Plant Facility for FIFTH YEAR	Year	1	18				
6	Operation and Maintenance of the Distribution Network and Plant Facility for SIXTH YEAR	Year	1	18				
7	Operation and Maintenance of the Distribution Network and Plant Facility for SEVENTH YEAR	Year	1	18				
			S	UBTOTAL B				

	KARGI 160 kWp (160kW AC) SOLAR PV MINI	GRID							
	Operation and Maintenance of the								
1	Distribution Network and Plant Facility for FIRST YEAR	Year	1	11.5					
2	Operation and Maintenance of the Distribution Network and Plant Facility for SECOND YEAR	Year	1	11.5					
3	Operation and Maintenance of the Distribution Network and Plant Facility for THIRD YEAR	Year	1	11.5					
4	Operation and Maintenance of the Distribution Network and Plant Facility for FOURTH YEAR	Year	1	11.5					
5	Operation and Maintenance of the Distribution Network and Plant Facility for FIFTH YEAR	Year	1	18					
6	Operation and Maintenance of the Distribution Network and Plant Facility for SIXTH YEAR	Year	1	18					
7	Operation and Maintenance of the Distribution Network and Plant Facility for SEVENTH YEAR	Year	1	18					
			S	UBTOTAL C					
	BORI 135 kWp (135kW AC) SOLAR PV MINI (	GRID							
1	Operation and Maintenance of the Distribution Network and Plant Facility for FIRST YEAR	Year	1	11.5					
2	Operation and Maintenance of the Distribution Network and Plant Facility for SECOND YEAR	Year	1	11.5					
3	Operation and Maintenance of the Distribution Network and Plant Facility for THIRD YEAR	Year	1	11.5					
4	Operation and Maintenance of the Distribution Network and Plant Facility for FOURTH YEAR	Year	1	11.5					
5	Operation and Maintenance of the Distribution Network and Plant Facility for FIFTH YEAR	Year	1	18					
6	Operation and Maintenance of the Distribution Network and Plant Facility for SIXTH YEAR	Year	1	18					
7	Operation and Maintenance of the Distribution Network and Plant Facility for SEVENTH YEAR	Year	1	18					
	SUBTOTAL D								
	FOROLLE 100 kWp (100kW AC) SOLAR PV MINI GRID								
1	Operation and Maintenance of the Distribution Network and Plant Facility for FIRST YEAR	Year	1	11.5					
2	Operation and Maintenance of the Distribution Network and Plant Facility for SECOND YEAR	Year	1	11.5					
3	Operation and Maintenance of the Distribution Network and Plant Facility for THIRD YEAR	Year	1	11.5					

4	Operation and Maintenance of the Distribution Network and Plant Facility for FOURTH YEAR	Year	1	11.5			
5	Operation and Maintenance of the Distribution Network and Plant Facility for FIFTH YEAR	Year	1	18			
6	Operation and Maintenance of the Distribution Network and Plant Facility for SIXTH YEAR	Year	1	18			
7	Operation and Maintenance of the Distribution Network and Plant Facility for SEVENTH YEAR	Year	1	18			
	SUBTOTAL E						
	TOTAL (to Schedule No. 7. Grand Summary)						
	Name of Bidder						
	Signature of Bidder						
	'Specify currency in accordance with specifications in Bid Data Sheet under ITB 18.1						

SCHEDULE NO. 7 - GRAND SUMMARY						
ltom	Description		Total Price <sup>1</sup>			
Item			Foreign	Local		
	Phase 1 - Supply and Installation					
1	Total Price of Schedule No 1 : Plant and Mandatory Spare Parts Supplied from Abroad	m				
2	Total Price of Schedule No 2 : Plant and Mandatory Spare Parts Supplied from Within the Employer's Country					
3	Total Price of Schedule No 3: Survey & Design Services					
4	Total Price of Schedule No 4 : Installation, Testing, Commissioning, and Othe Services					
5	Total Price of Schedule No 5 : Environmental, Social, Health And Safety (ESHS) Services					
	Phase 2 - Operations and Maintenance					
6	Total Price of Schedule No 6 : Operation & Maintenance					
	TOTAL (to Letter of Bid)					
	Name of	Name of Bidder				
	Signature					

SCHEDULE NO. 8 - RECOMMENDED SPARE PARTS (NOT BE CONSIDERED FOR EVALUATION, BUT ONLY FOR INFORMATION)								
	Description	Unit	Oty	Unit Price <sup>1</sup>		Total Price <sup>1</sup>		
Item				CIF or CIP	<i>EXW</i>	(1) x (2) or (3)		
item				(foreign parts)	(local parts)			
			(1)	(2)	(3)			
		Name of Bidder						
	Signature of Bidder							
	'Specify currency. Create and use as many columns for Unit Price and Total Price as there are currencies.							