

[Bidder's Letterhead]

[Date]

To: Tarlac State University

Re: [Invitation to Bid No.]

BILL OF QUANTITIES

Item No. (1)	Work Description (2)	Materials, supplies, etc.		Work Item		Direct Cost	Indirect Cost	Total Direct & Indirect Cost (9)	Value Added Tax (10)	Total Cost (11)
		Quantity (3)	Unit (4)	Quantity (5)	Unit (6)	Materials, Labor, & Equipment (7)	Overhead, Contingencies, Miscellaneous, & Profit (8)			
1. General Requirements										
1.1	Mobilization & Demobilization			1	lot					
1.2	Construction Occupational Safety & Health			1	lot					
1.3	Project Billboard, Temporary Facilities, and Barricade			1	lot					
1.4	Permits and Clearances			1	lot					
									Sub-Total	
2. 40kW Grid-tied PV System (Student Center Building)										
2.1. Mounting Structure										
2.1.1	Solar Panel Railings 2.3m	144	pc							
2.1.2	L-foot	466	set							
2.1.3	Mid Clamp	164	set							
2.1.4	End clamp	96	set							
2.1.5	Rail connector	144	set							
2.1.6	Grounding lug clip	96	set							
2.2	Inverters, 20KW Grid-Tied Inverter System			2	set					
2.3. Solar Panels										
2.3.1	550W Solar Panels	82	set							
2.3.2	700W Rapid shutdown Device	82	set							
2.3.3	Rapid Shutdown System Transmitter with power supply	2	set							
2.4. Cable layout										
2.4.1	100mm x 100mm x 1m Outdoor galvanized steel cable tray	84.00	m							
2.4.2	2" RSC Pipe	8	pc							
2.4.3	2" RSC Elbow	1	pc							
2.4.4	2" PVC Pipe	14	pc							
2.4.5	2" PVC Elbow	3	pc							
2.4.6	40mm diameter UV- Rated HDPE spiral conduit Black (100m/roll)	2	set							



Installation of Solar Harvesting System at Lucinda Extension Campus (Student Center and CFTR Building)

2.4.7	4 mm ² DC Cable	956.00	m						
2.4.8	MC4 pair connectors (Male and Female)	70	set						
2.4.9	CAT6 Lan Cable	200.00	m						
2.4.10	3.5 mm ² THHN/THWN Cu. Wire	300.00	m						
2.4.11	80 mm ² THHN/THWN Cu. Wire	270.00	m						
2.4.12	22 mm ² THHN/THWN Cu. Wire	156.00	m						
2.4.13	8.0 mm ² THHN/THWN Cu. Wire	14.00	m						
2.4.14	Concrete Encasement including Excavation and Compacted Backfill	1	lot						
2.4.15	2" Service Entrance Cap	1	pc						
2.4.16	6" X 6" X 4" Metal pullbox	1	set						
2.5.	Panelboards			1	lot				
2.5.1	Unitized Panelboard DC and AC Combiner (breakers and surge protection devices) and space for mounting of data logger and transmitter power supply with exhaust fans, din rail, pvc cable tray, grounding busbar, and accessories including angle bar, cutting disk, welding rods, primer gray, bolts with nuts and washer, etc.	1	lot						
2.5.2	PV System Disconnect 320 AT, 3 pole, 230V MCCB in NEMA 4X Enclosure	1	set						
2.6.	PV Lightning and Grounding system			1	lot				
2.6.1.	3.5 mm ² THHN/THWN Cu. Wire	200.00	m						
2.6.2.	8.0 mm ² Bare Cu. Wire	50.00	m						
2.6.3.	Early Streamer Emission (ESE) Air Terminal with 2 meters pole including terminal base and cables supports	1	set						
2.6.4.	3m x 5/8" φ Copper Ground Rod with grounding clamp	5	set						
2.7.	Communication Device, Data Logger with power supply			1	set				
2.8.	Net-metering, Application for Net-Metering including REC meter cables, and accessories			1	lot				
									Sub-Total
3.	80kW Grid-tied PV System (CFTR Building)								
3.1.	Mounting Structure			1	lot				
3.1.1	Solar Panel Railings 2.3rh	236	pc						
3.1.2	L-foot	845	set						
3.1.3	Mid Clamp	207	set						
3.1.4	End clamp	82	set						
3.1.5	Rail connector	236	set						
3.1.6	Grounding lug	82	set						
3.2.	Inverters, 20KW Grid-Tied Inverter System			4	set				
3.3.	Solar Panels			1	lot				
3.3.1	550W Solar Panels	176	set						
3.3.2	700W Rapid shutdown Device	176	set						
3.3.3	Rapid Shutdown System Transmitter with power supply	4	set						

Installation of Solar Harvesting System at Lucinda Extension Campus (Student Center and CFTR Building)

3.4. Cable layout			1	lot					
3.4.1	100mm x 100mm x 1m Outdoor galvanized steel cable tray	212.00	m						
3.4.2	4" RSC Pipe	1	pc						
3.4.3	4" RSC Elbow	2	pc						
3.4.4	3" RSC Pipe	4	pc						
3.4.5	40mm diameter UV- Rated HDPE spiral conduit Black (100m/roll)	3	set						
3.4.6	4 mm ² DC Cable	3200.00	m						
3.4.7	MC4 pair connectors (Male and Female)	269	set						
3.4.8	CAT6 Lan Cable	100.00	m						
3.4.9	3.5 mm ² THHN/THWN Cu. Wire	960.00	m						
3.4.10	150 mm ² THHN/THWN Cu. Wire	54.00	m						
3.4.11	30 mm ² THHN/THWN Cu. Wire	18.00	m						
3.4.12	22 mm ² THHN/THWN Cu. Wire	69.00	m						
3.4.13	8.0 mm ² THHN/THWN Cu. Wire	23.00	m						
3.4.14	3" Service Entrance Cap	2	set						
3.4.15	Heavy Duty Secondary Rack w/ 3-Spool Insulator	2	set						
3.4.16	6" X 6" X 4" Metal pullbox	1	set						
3.5. Panelboards				1	lot				
3.5.1	Unitized Panelboard DC and AC Combiner (breakers and surge protection devices) and space for mounting of data logger and transmitter power supply with exhaust fans, din rail, pvc cable tray, grounding busbar, and accessories including angle bar, cutting disk, welding rods, primer gray, bolts with nuts and washer, etc.	1	lot						
3.5.2	PV System Disconnect 350 AT, 3 pole, 230V MCCB in NEMA 4X Enclosure	1	set						
3.6. PV Lightning and Grounding system				1	lot				
3.6.1	3.5 mm ² THHN/THWN Cu. Wire	400.00	m						
3.6.2	8.0 mm ² Bare Cu. Wire	100.00	m						
3.6.3	Early Streamer Emission (ESE) Air Terminal with 2 meters pole including terminal base and cables supports	1	set						
3.6.4	3m x 5/8" φ Copper Ground Rod with grounding clamp	5	set						
3.7. Communication Device	Data Logger with power supply			1	set				
3.8. Net-metering	Application for Net-Metering including REC meter cables and accessories			1	lot				
								Sub-Total	
	Total Bid Price								(Total amount in figures)
									(State total amount of Bid in words)

[Signature]
 [Name of Authorized Signatory]
 [Position/Title of Authorized Signatory]