

PRAIRIE STATE COLLEGE
Office of Finance and Administration

Bid Specifications: Renewable Energy Trainers

Item #	Specifications	Quantity	Unit Cost	Total Cost
1A	ITEM: Turbine Nacelle Trainer and Curriculum	1		
	<p>Specifications are as follows: Mobile turbine Nacelle student workstation trainer that will simulate operations, adjust, troubleshoot and maintain wind turbine nacelle systems. The simulator shall be adjustable to mimic actual scenarios include but not limited to, varying wind speed and direction, allowing for training to operate the yaw control and turbine safely. Construction shall contain industry-standard components.</p> <p>Components for a complete working system shall include but not be limited to:</p> <ul style="list-style-type: none"> a) One (1) Complete mobile workstation to demonstrate all aspects of turbine Nacelle system b) One (1) Wind simulator unit c) One (1) Turbine control unit d) One (1) Yaw system with tower module with position indicators e) One (1) Hydraulic braking unit f) One (1) Weather sensors (wind vane and anemometer) to send control signals to the system (may be electronic) g) One (1) Pressure gauge assembly h) One (1) Gearbox Lubrication unit i) One (1) Main workstation disconnect j) One (1) User manual – Paper copy k) One (1) Digital copy of User manual, PDF or word format (CD or USB) l) One (1) Set of electrical schematics of the training systems – Paper copy m) One (1) Digital copy of electrical schematics, PDF or AutoCAD format (CD or USB) n) Minimum of five (5) gallons of any hydraulic oil and any other required fluids o) One (1) Lock out/tag out kit p) One (1) Fault insertion/troubleshooting system, software or manual q) One (1) System monitoring software r) Input voltage: 208V/3-phase/60hz or 120V/1-phase/60hz s) All related power cords and cables for complete and working connection t) Communication protocols: Ethernet, USB u) Workstation assembly and system training shall be included 			
1B	<p>Associated Turbine Nacelle Curriculum</p> <p>Specifications are as follows: Curriculum topics shall include but not be limited to: trainer familiarization and safety, hub functions, pitch and yaw control, power, weather impact, braking, system troubleshooting. Submittals shall include:</p>			
	<ul style="list-style-type: none"> a) One (1) Instructor resource guide – paper copy b) One (1) Student manual – paper copy c) One (1) Digital copy of instructor and student manual via USB or CD 			
	Total a), b), & c)			
	<p>or:</p> <ul style="list-style-type: none"> d) Minimum of two (2) years of digital software support subscription/license if required by Turbine Nacelle Trainer, one (1) seat to begin July 1, 2020 			
	Total d)			

Item #	Specifications	Quantity	Unit Cost	Total Cost
2A	ITEM: Alternative Energy Trainer: Solar and Wind Energy Trainer and Curriculum	1		
	<p>Specifications are as follows: Mobile solar/wind student workstation trainer that will demonstrate how wind turbines and solar cells are being used in the consumer and industrial markets. The system should show the installation, operation, maintenance and servicing of the systems. Construction shall contain industry-standard components</p> <p>Components for a complete working system shall include but not be limited to:</p> <ul style="list-style-type: none"> a) One (1) Complete mobile workstation to demonstrate all aspects of hybrid energy system b) One (1) Wind turbine generator with motor for wind simulation c) One (1) Battery bank d) One (1) Solar photovoltaic array module e) One (1) Sun simulator assembly f) One (1) Utility meter g) One (1) User manual – Paper copy h) One (1) Digital copy of User manual, PDF or word format (CD or USB) i) One (1) Set of electrical schematics of the training systems – Paper copy j) One (1) Digital copy of electrical schematics, PDF or AutoCAD format (CD or USB) k) Minimum of one (1) gallon of any required lubricating oil or other fluids l) One (1) Lock out/tag out kit m) One (1) Main workstation disconnect n) One (1) System monitoring software o) Input voltage: 208V/3-phase/60hz or 120V/1-phase/60hz and p) All related power cords and cables for complete working connection q) Communication protocols: Ethernet, USB r) Workstation assembly and training shall be included 			
2B	<p>Alternative Energy Trainer: Solar/Wind Curriculum Specifications are as follows: Curriculum topics shall include by not be limited to: energy fundamentals, trainer familiarization and safety, solar concepts training, wind turbine concepts, sustainability. Submittals shall include:</p>			
	<ul style="list-style-type: none"> a) One (1) Instructor resource guide – paper copy b) One (1) Student manual – paper copy c) One (1) Digital copy of instructor and student manual via USB or CD 			
	Total a), b), & c)			
	<p>or:</p> <ul style="list-style-type: none"> d) Minimum of two (2) years of digital software support subscription/license if required by Solar/Wind Energy Trainer, one (1) seat to begin July 1, 2020 			
	Total d)			
	<p>Minimum three (3) year warranty shall be provided for all items listed above. Delivery shall be included for all items listed above: Delivery Within 30 days of bid award</p>			
<p>FOB: Prairie State College, 202 S. Halsted St., Chicago Heights, IL 60411</p>				
<p>Company Name: _____</p> <p>Signature: _____</p> <p>Phone Number: _____ Date: _____</p>				