REQUEST FOR PROPOSAL
FOR A SOLAR ENERGY POWER PURCHASE AGREEMENT TO PROVIDE SOLAR GENERATED ELECTRICITY
FOR MONTCLAIR SCHOOL DISTRICT FACILITIES

BID ANALYSIS REPORT

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Prepared by:

Honeywell Building Solutions
Energy Services Group

Summary of Proposals

In accordance with the Montclair School District (BOE) approval; a request for proposals (RFP) was issued by the BOE seeking bids from qualified energy services firms to provide a power purchase agreement service to generate solar electricity for the aggregate of the 7 (seven) district sites that constitute the base bid:

SES 1 Bradford Elementary School
SES 2 Buzz Aldrin Middle School
SES 3 George Inness Annex (HS-9th), Athletics
SES 4 Glenfield Middle School
SES 5 Montclair High School
SES 6 Northeast Elementary School
SES 7 Woodman Field

There were 4 bids (proposals) submitted prior to the due date and time of October 6, 2020; 11:00 AM EST:

1. BIOSTAR RENEWABLES /GEOSCAPE SOLAR
2. HESP SOLAR
3. EZNERGY/GREENSKIES
4. SUNVEST SOLAR

In evaluating the bids, the goals and objectives of the BOE were carefully considered. The criteria established in the RFP are:

- Price per solar kWh, as well as total long-term savings (40%);
- Quality of the proposed equipment and the technical design (35%);
- Qualifications and experience of the vendor (vendor teams) (25%).

Based on a review of the submissions, all 4 of the bids are recommended for consideration of award based on the RFP criteria. Compliance with bidding requirements should be verified by a BOE representative.

Each of these bidders had a good pricing structure, good proposed design and good projected 15-year savings. Also, their experience with solar construction is acceptable; and they have good experience in providing solar energy systems; including New Jersey public works projects specifically.

Also, the RFP requested an ADD/ALTERNATE pricing form, which asked that the Bidders to submit a price per KWh to do both the solar energy systems and provide the scope of services for the roofing work needed at the sites. All 4 proposals included the Base Bid and the Add Alternate pricing forms.

General Summary of Bids

BIOSTAR RENEWABLES: This team has good experience with solar installations and public work projects; although the other teams have more school and New Jersey specific experience. The design includes good equipment, although the racking systems should be reevaluated since UL 2703 certification is required and it is pending on the racking they used in the design. includes very high efficiency equipment including exceeding some warranty requirements. The design is good, although less total capacity and production compared to other proposals.

EZNERGY/GREENSKIES: This team submitted a very good proposal. They have very good experience both in terms of New Jersey public works solar energy systems and specifically New Jersey schools. Proposal includes premium and high-efficiency equipment and the design optimizes the feasible areas of the roof. No racking system was specified for the sloped roof areas of the roof and should be confirmed for compliance with RFP requirements.

HESP SOLAR: HESP submitted a good proposal. They specified a premium quality and high efficiency solar panel and a high quality and high efficiency inverter. The racking system fully complies with the RFP requirements. The proposed design is good although they have overestimated the total capacity and thus the savings would be less than estimated in their proposal form. They have a lot of public works experience in New Jersey and other states; including school districts. This company is vertically integrated and thus would be the contractor and the PPA financing company.

SUNVEST SOLAR: SunVest Solar offered a good proposal. Their technical plan and proposed equipment are both good. The solar panels specified is a premium product with high efficiency. The inverter they included is also high efficiency. Their experience and qualifications include New Jersey public works and school district solar projects. Their technical design was very good with good utilization of available roofing areas.

Solar kWh Pricing and Total Saving Comparison

The Price/Savings is 40% of the evaluation criteria; as such 40 points, out of 100 are assigned to the evaluation of this aspect of the recommended proposals.

The Pricing and Saving chart below is based on the proposals for the BASE BID

Montclair School District Solar PPA RFP Bid Price/Savings Comparison				
BASE BID		**15 Year Savings Comparison**		
Proposers:	BioStar	Eznergy	HESP	Sunvest
Total Savings	$1,515,369	$2,769,442	$2,842,366	$2,743,160
Ranking	4	2	1	3
Subtotal (Out of 20)	10.7	19.5	20	19.3
BASE BID		**$/KWh Price Comparison**		
Proposers:	BioStar	Eznergy	HESP	Sunvest
Year 1	$0.0100	$0.0049	$0.0180	$0.0145
Year 2	$0.0675	$0.0050	$0.0182	$0.0145
Year 3	$0.0675	$0.0050	$0.0184	$0.0145
Year 4	$0.0675	$0.0051	$0.0185	$0.0145
Year 5	$0.0675	$0.0052	$0.0187	$0.0145
Year 6	$0.0675	$0.0053	$0.0189	$0.0145
Year 7	$0.0675	$0.0054	$0.0191	$0.0145
Year 8	$0.0675	$0.0054	$0.0193	$0.0145
Year 9	$0.0675	$0.0055	$0.0195	$0.0145
Year 10	$0.0675	$0.0056	$0.0197	$0.0145
Year 11	$0.0675	$0.0057	$0.0199	$0.0145
Year 12	$0.0675	$0.0058	$0.0201	$0.0145
Year 13	$0.0675	$0.0059	$0.0203	$0.0145
Year 14	$0.0675	$0.0059	$0.0205	$0.0145
Year 15	$0.0675	$0.0060	$0.0207	$0.0145
Average Price	**$0.0637**	**$0.0054**	**$0.0193**	**$0.0145**
Escalation Rate (Annual %)	N/A	1.50%	1.50%	0.00%
Ranking	**4**	**1**	**3**	**2**
Subtotal (out of 20)	**1.7**	**20**	**5.6**	**7.5**
Price/Savings Criteria Total Points out of 40 points	**12.4**	**39.5**	**25.6**	**26.8**
OVERALL RANKING PRICE/SAVINGS	**4**	**1**	**3**	**2**

The Pricing and Savings chart below is based on the proposals for the ADD/ALTERNATE BID

Montclair School District Solar PPA RFP Bid Price/Savings Comparison				
ADD/ALTERNATE		**15 Year Savings Comparison**		
Proposers:	BioStar	Eznergy	HESP	Sunvest
Total Savings	$1,515,369	$1,148,130	$1,481,227	$850,155
Ranking	1	3	2	4
Points (Out of 20)	20	15	20	11
ADD/ALTERNATE		**$/KWh Price Comparison**		
Proposers:	BioStar	Eznergy	HESP	Sunvest
Year 1	$0.1000	$0.0770	$0.0680	$0.1025
Year 2	$0.1000	$0.0782	$0.0694	$0.1025
Year 3	$0.1000	$0.0793	$0.0707	$0.1025
Year 4	$0.1000	$0.0805	$0.0722	$0.1025
Year 5	$0.1000	$0.0817	$0.0736	$0.1025
Year 6	$0.1000	$0.0830	$0.0751	$0.1025
Year 7	$0.1000	$0.0842	$0.0766	$0.1025
Year 8	$0.1000	$0.0855	$0.0781	$0.1025
Year 9	$0.1000	$0.0867	$0.0797	$0.1025
Year 10	$0.1000	$0.0880	$0.0813	$0.1025
Year 11	$0.1000	$0.0894	$0.0829	$0.1025
Year 12	$0.1000	$0.0907	$0.0845	$0.1025
Year 13	$0.1000	$0.0921	$0.0862	$0.1025
Year 14	$0.1000	$0.0934	$0.0880	$0.1025
Year 15	$0.1000	$0.0948	$0.0897	$0.1025
Average Price	**$0.1000**	**$0.0856**	**$0.0784**	**$0.1025**
Escalation Rate (Annual %)	0%	1.50%	1.50%	0.00%
Ranking	**3**	**2**	**1**	**4**
Points (out of 20)	**16**	**18**	**20**	**15**
Price/Savings Criteria Total Points out of 40 points	**12.4**	**39.5**	**25.6**	**26.8**
OVERALL RANKING PRICE/SAVINGS	**4**	**1**	**3**	**2**

Base Bid or Add/Alternate Pricing Selection

Based on an evaluation of the decreased saving versus the cost of the re-roofing requirements; there is no financial savings advantage to the BOE for selecting the ADD/ALTERNATE bid pricing, but the BOE and its representatives should make the decision based on the best interest of the district as to proceed with the Base Bid or to choose the Add/Alternate Bids.

Conclusions and Recommendations

Each of these 4 bids would provide viable solutions and substantial savings to the BOE. However, based on all of the evaluation criteria the bid submitted by **Eznergy team** would receive the highest overall rating based on their low pricing, high quality technical proposal and equipment; as well as their extensive experience.

In the next section, there are more detailed summaries of the 4 proposals received for this RFP. The proposals are further delineated based on the price, savings, technical design, proposed equipment and provided documentation of the bidder's qualifications and experience in delivering solar PPA services.

BioStar Renewables Technical Proposal Evaluation				
	Solar Panel Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	ZNSHINE Solar 420 W dc monocrystalline panels.	25 year warranty on linear power and 12 product warranty	72 cell mono-crystalline module.	Fully complies with RFP requirements, less efficienct than other proposals.
	Inverter Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	SunGrow M/SG20KTL-M and SG55	10 years up to 20 year option	98.0% efficiency rating.	Fully complies with RFP requirements. High Efficiency Inverter. Ensure that 15 year warranty option is included.
	Mounting System Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Advanced Racking ballasted for flat roof areas and clamp system for sloped roofs	20 years	Ballasted mounted steel structure rails and clamps **UL 2703 "pending" and Sloped roof clamp system	Does not comply with the RFP requirements. The sloped roof racking system does not have an integrated boot system and flat roof racking does not have UL 2703 certification, which is required.
	Design Capacity (KW dc)	**Tilt**	**Additional Comments**	
Base Bid	1,163.30	various	Good layout, design.	
	15 Year Average Price	**Tilt**	**15 Year Savings**	**Additional Comments**
Base Bid	$0.0637	various	$1,515,369	

NOTES: This team has good experience in design construction for solar energy systems. They have much less expereince than the other bidders specifically in school based systems and New Jersey public works projects. The design includes good equipment, although the current racking system in the proposal should be re-evaluated. They are partnering with GeoScape Solar, however the form of partnership is not described in the proposal. Some of the required documents have not been provided by both companies.

ADD/ALTERNATE BID				
	Design Capacity (KW	**Tilt**	**Additional Comments**	
ADD/ALT	1,163.30	various	same as above	
	15 Year Average Price		**15 Year Savings**	**Additional Comments**
ADD/ALT	$0.10	various	$803,267	

Eznergy and Greenskies Technical Proposal Evaluation				
	Solar Panel Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Hanwha Q celss Q Peak Dou L-G5.2	25 Year/50 year workmanship	480 W dc 144 split cells. 19.9% efficiency rating.	High efficiency panel and complies with all of the rfp requirements.
	Inverter Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Chint Inverters CPS 277/480 50 and 60 KW	15 years	98.8% efficiency rating.	High efficiency inverter, complies with RFP requirements.
	Mounting System Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Genmounts LT Ballasted Solar Racking	25 years	Aluminum Z rack non penetrating racking system.	Fully complies with the RFP requirements for flat roof installations. *The sloped roof racking is not specificied and should be verified to ensure compliance with the RFP requirements.*
	Design Capacity (KW dc)	**Tilt**	**Additional Comments**	
Base Bid	1,219.38	varies (5 degree for flat roof areas.)	good design and capacity density; compared to other proposals	
	15 Year Average Price		**15 Year Savings**	**Additional Comments**
Base Bid	$0.0054		$2,769,442	
NOTES: This team has very good experience both in terms of New Jersey public works solar energy systems and specifically New Jersey schools. The mounting system type should be confirmed prior to an award for this vendor. Technical proposal is very good. Equipment is high performing. Eznergy is partnering with GreenSkies Solar who will be the PPA financing agent.				

ADD/ALTERNATE BID				
	Design Capacity	**Tilt**	**Additional Comments**	
ADD/ALT	1,219.38	varies (5 degree for flat roof areas.)	same as above.	
	15 Year Average		**15 Year Savings**	**Additional Comments**
ADD/ALT	$0.0856		$1,148,130	

HESP Solar Technical Proposal Evaluation				
	Solar Panel Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Canadian Solar HIDM 420 W dcMonocrystalline	25 year warranty on linear power and 15 product warranty	Mono-crystalline module with rated efficiency at 20.4%.	High efficiency panels. Product warranty exceeds RFP requirements.
	Inverter Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Yaskawa/Solectria PVI inverters and TL	10 year option for 15 and 20 years	98.6% efficiency rating.	Complies with RFP requirement provided extension is included as required. High efficiency
	Mounting System Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Solar Mount model Atlantis ballast mount for flat roofs and Iron Ridge Flush Mount System for sloped areas.	20 years	Aluminum components, ballasted mounted "pan", non-penetrating system. Aluminum rails and connectors for sloped roofs.	Fully complies with RFP requirements.
	Design Capacity (KW dc)	**Tilt**	**Additional Comments**	
Base Bid	1430.1	various	Design is good although slightly over estimated the solar capacity in the layout provided. More sloped area roofing could be used.	
	15 Year Average Price	**Tilt**	**15 Year Savings**	Additional Comments
Base Bid	$0.0193		$2,842,366	Savings would be less than
This is a good proposal although the design over-estimates the KW dc for the project to some degree and thus the savings amount would be reduced in comparison to other proposals. Vendor has very good experience with schools, public works and solar installations, especially in New Jersey.				

ADD/ALTERNATE BID				
	Design Capacity	**Tilt**	**Additional Comments**	
ADD/ALT	1,430.10	various	same as above	
	15 Year Average Price		**15 Year Savings**	**Additional Comments**
ADD/ALT	$0.0784	various	$1,481,227	

SunVest Solar Technical Proposal Evaluation				
	Solar Panel Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Trina Solar Duomax 400 Watt panels	25 year warranty on linear power and 10 product warranty	144 cell mono-crystalline module with rated efficiency at 19.7%.	High efficiency panels. Product warranty complies with RFP requirements.
	Inverter Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Solaredge	12year: option for 15 and 20 years	99.5% efficiency rating.	Complies with RFP requirements; ensure 15 year warranty extension is included prior to award.. Technical design includes power optimizers which would increase electricity production.
	Mounting System Type	**Warranty**	**Description**	**Additional Comments**
Base Bid	Iron Ridge Flush Mount System for sloped areas. EcoFoot2	20 years for Iron Ridge and 25 for EcoFoot	Aluminum components, ballasted, non-penetrating system for flat roofs and aluminum rails and connectors for sloped roofs.	Fully complies with RFP requirements.
	Design Capacity (KW dc)	**Tilt**	**Additional Comments**	
Base Bid	1,296.56	various		
	15 Year Average Price		**15 Year Savings**	**Additional Comments**
Base Bid	$0.0145		$2,743,160	
NOTES: This team has experience both in terms of New Jersey public works solar energy systems and specifically New Jersey schools. The equipment specified is high performing and the design was very good.				

ADD/ALTERNATE BID				
	Design Capacity	**Tilt**	**Additional Comments**	
ADD/ALT	1,296.56	various	same as above	
	15 Year		**15 Year Savings**	**Additional Comments**
ADD/ALT	$0.1025		$850,155	