

Analysis of the Proposals for a Solar Energy Power Purchasing Agreement Project at the Swedesboro Woolwich School District Facilities

This analysis is provided to the Swedesboro Woolwich School District from Honeywell Building Systems, ESIP Manager and Here Comes the Sun, Solar Energy Consultant
V. SEPTEMBER 19, 2022



An analysis of the Proposal for a Solar Energy Power Purchasing Agreement Project at the Swedesboro Woolwich School District Facilities was performed in order to evaluate the viability, technical qualifications and the financial benefit of the proposed electric saving measures from Solar Energy Systems at four (4) of the school sites.

THE BACKGROUND:

A request for proposals (RFP) was issued by the BOE seeking bids from qualified energy services firms to provide a Solar Energy System (SES) power purchase agreement (PPA) to generate electricity for the aggregate of the 4 (four) District sites that constitute the Base Bid:

School Site	SES
Charles G. Harker School	SES 1
Governor Charles C. Stratton School	SES 2
Margaret C. Clifford School	SES 3
Walter Hill School	SES 4

The Proposals were received in a “Competitive Contracting format”. Three vendors attended the two site visits conducted by the Honeywell team. However, only one (1) vendor submitted a bid proposal. Bids were received for the project on September 7, 2022, at 2:00 p.m. at the District Offices.

PROPOSAL(S) RECEIVED

The one (1) proposal received was collected from HESP Solar (HESP) and in light of the fact that only one (1) qualified proposal was received; this report is focused on validating the proposal submission both technically and financially, as well as provides guidance as to award or to re-bid. The Evaluation Committee is now charged with the decision to:

- to award a contract to the sole bidder; or rather
- to re-issue the RFP in the hopes that additional qualified vendors might submit proposals and that those proposals would include lower kWh pricing and higher savings.

POTENTIAL PROJECT BIDDING FACTORS

Based on our experience with Solar Energy vendors and past projects; it is our opinion that the following factors might have played a role in limiting the number of vendors interested in submission of proposals for this Project:

- 1) It is likely that the small scale of the Solar ECM (just over 1 megawatt) may have played a part in the limited interest of providers.
- 2) The difficulty with delays and unclear guidance with interconnection within the Atlantic City Electric territory.



- 3) Due to the pandemic certain equipment has been slow to arrive, subcontractor availability is limited, and qualified bidders are already under contract/construction with multiple awards already.

Additionally, it should be noted that the first Pre-Proposal Conference was not well attended. The Honeywell team scheduled an additional site visit and contacted additional vendors to attend. In response, two (2) additional vendors came forward to pick up the RFP documents and attend the second site visit.

RFP EVALUATION CRITERIA

In evaluating the proposal, the goals and objectives of the Board of Education were stated in the bidding documents as pricing and other factors:

- Proposed Price per solar kWh, as well as total long-term savings (40%)
Both the per kWh price as well as the rate of escalation will be considered in the determination of the lowest price and the highest savings over the 15 - year term of the PPA
- Technical Bid (design, material specifications, installation plan) (40%)
The technical Bid will include an evaluation of the major system components and their specific compliance with the minimum standards listed in the RFP. Also, the proposed design of the Solar Energy Systems shall be reviewed to ensure that energy production is optimized based on the efficiency of the components, the specifications of the array layout and the electrical and physical integration with the site.
- Experience and Qualifications (20%)
Specific experience in engineering and construction of commercial solar energy systems, as well as specific experience of design, engineering and operation of solar energy systems for public entities and school districts in New Jersey. Quality of construction and the ongoing long-term performance for past projects, references and qualifications of team members shall be included in the evaluation. The company history and financial strength will also be considered as part of this criteria.

ESIP MANAGER TECHNICAL AND FINANCIAL ANALYSIS

Based on the review by the Honeywell team; the HESP SOLAR PPA Proposal was very good technically as well as financially for the District's facilities. The Proposed project with HESP Solar would:

- Reduce the electricity rate by 55% versus utility charges
- Save of 16,740,176 kWhs over 15 years and
- Save of \$1,143,697 over 15 years

Based on our technical review of the submission from HESP Solar: it is recommended that the Evaluation Committee consider it for Award. Specifically, the Base Bid that includes ground mounted solar at two sites instead of using the roofs. By selecting the Base Bid; no re-roofing at the two school sites is needed prior to the installation of the Solar Energy Systems.

This Proposer has a very good pricing structure, a very good, proposed design, excellent premium equipment that meets and exceeds the RFP requirements and great savings. The 15-year savings from



this Proposer is very close to the technical capacity and savings reports provided by the Honeywell Teams estimates based on our experience with similar public bids. Additionally, these savings from the Solar Energy PPA ensures cost-effective implementation of the comprehensive energy efficiency measures planned for the District.

It is our professional opinion that:

1. The HESP Solar Proposal price is very low for the current bidding environment.
2. There proposed escalation rate of 1% per year is significantly lower than the estimate inflation rate for utility power (2.4%).
3. The proposed PPA pricing and savings will be highly beneficial in advancing the cost-effective implementation for the other energy conservation measures.
4. The projected 15-year savings from this Proposer (\$1,143,697) compliments the scope of work for the required funding for the other ECMS that are also planned as part of this comprehensive ESIP plan.

GENERAL SUMMARY OF BIDDER & SUBMISSION:

HESP SOLAR: HESP submitted a solid proposal. They specified premium quality and high efficiency solar panel as well as high quality and high efficiency inverters. The racking system fully complies with the RFP requirements. Also, this team has a lot of public works experience including; school districts in New Jersey and other states. This company is vertically integrated and thus would be the contractor and the PPA financing company.

CONCLUSIONS AND RECOMMENDATIONS

The Proposal submission by HESP Solar has been independently reviewed to ensure that this solar Proposal meets the savings requirements for the overall ESIP plan. In addition, a full technical evaluation of this proposal was performed for all aspects of the evaluation criteria to ensure that this contractor would be an advantageous selection based on their technical proposal, the pricing, the quality of the proposed equipment and their experience in delivering this type of Solar PPA services.

If the Evaluation Committee decides to go forward to Award this contract to HESP Solar: it is our technical opinion that this proposal is meritorious of Award based on all of the RFP mandated evaluation criteria.

It is our recommendation that you forward a copy of this evaluation and the HESP Proposal to the Board Attorney. It is recommended that the Board Attorney review all aspects of vendor proposals for compliance with regulations and procedures of the bidding laws.

As part of an Award of this contract the BASE BID would provide the highest overall savings and should be selected over the alternate.

NEXT STEPS

Evaluation Committee Review and Recommendation to the BOE.



HESP Solar Technical Proposal Evaluation				
	Solar Panel Type	Warranty	Description	Additional Comments
Base Bid	Canadian Solar Tall Max HIDM 420 W dc Monocrystalline PERC panel	25-year warranty on linear power and 15 product warranty	Mono-crystalline module with rated efficiency at 20.4%.	High efficiency panels. Premium module. 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 inverter. Proposal includes the option of a kiosk.
	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 ground mounted areas.	20 years	Aluminum components ballasted mounted "pan", non-penetrating system. Aluminum rails and connectors for sloped roofs.	Fully complies with RFP requirements.
	Year 1 Price		15 Year Savings	Additional Comments
Base Bid	4.5 cents/KWh		\$1,143,697	55% savings
<p>NOTES: This team has very good experience both in terms of New Jersey public works solar energy systems and specifically New Jersey schools. The design includes very high-efficiency equipment, high quality equipment and is well designed to optimize the production of the solar energy systems at each school.</p>				