EVALUATION REPORT

Evaluation of Proposals Received on November 27, 2019 in Response to a Request for Proposals for a Solar Energy Power Purchase Agreement to Provide Solar Generated Electricity for Middlesex County Vocational and Technical Schools; Piscataway Campus

Prepared for:
Middlesex County Vocational and Technical Schools Board of Education

By:
The Middlesex County Vocational and Technical Schools Board of Education Evaluation Team

Dated:
December 9, 2019

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Executive Summary

This Report is being provided pursuant to the requirements of the competitive contracting provisions of the Public School Contracts Law, specifically, N.J.S.A. 18A:18A-4.1(k); LFN 2008-20, dated December 3, 2008, *Contracting for Renewable Energy Services*; BPU protocol for measuring energy savings in PPA agreements (*Public Entity Energy Efficiency and Renewable Energy Cost Savings Guidelines, dated February 20, 2009*); LFN 2009-10, dated June 12, 2009, *Contracting for Renewable Energy Services: Update on Power Purchase Agreements,* and all other applicable law.

The purpose of the Evaluation Report is to provide the Middlesex County Vocational and Technical Schools Board of Education (hereafter referred to as "BOE"), with an evaluation of proposals received for its planned solar project and to provide a recommendation to the BOE.

The goal of the BOE is to implement a solar energy project that is environmentally responsible, educational and economically beneficial to the BOE. To this end, on October 30, 2019, the BOE issued a Request for Proposals ("RFP"), as amended, for a Power Purchase Agreement ("PPA") for the purchase by the BOE of electricity generated by photovoltaic solar energy systems ("Systems") implemented by a proposing firm ("Respondent") to the RFP, at its sole cost and expense (the Respondent to be awarded the project will be referred to as the "Successful Respondent"), to be located on facilities and lands owned by the Middlesex County Vocational and Technical Schools Board of Education, in the County of Middlesex, New Jersey.

Pursuant to the RFP, the Successful Respondent will finance, design, permit, construct, install, operate and maintain the System, all in accordance with the terms set forth in the RFP including the terms proposed on the Successful Respondent's PPA Price Quotation Proposal Forms. The Successful Respondent will also have all ownership rights to the potential tax benefits and Solar Renewable Energy Certificates ("SRECs") generated by the Systems at each facility and will monetize the SRECs.

The RFP contained technical, site specific requirements and the results of the preliminary feasibility assessment performed by the BOE's energy consultant, Gabel Associates, which defined and estimated the technical potential for the System. The RFP required respondents to perform their own assessment of technical potential and sizing of the Systems. Respondents were also encouraged to include educational and curriculum-based content as part of the proposed solution.

The BOE sought proposals for a mandatory "Option 1" as set forth in Article II of the RFP, which included only ground-mounted systems to be developed at the tennis court/picnic area, south parking lot, along Preston avenue, and a walkway. The BOE also encouraged, but did not require, Respondents to submit proposals for an additional option.

In addition to the installation of solar, the RFP required respondents to include the cost and work associated with removing the trees, tennis courts, and parking lot pavement in the project area and replanting trees elsewhere on site and grass beneath the arrays. This demolition and landscaping are capital projects that when included in the solar project cost lead to an avoided cost savings for the BOE.

Respondents were permitted to provide additional, alternative proposals based on their own due diligence, feasibility assessments, and alternative strategies, as long as the Respondents included a proposal on the mandatory proposal Option 1. Two Respondents provided an alternative proposal option. Under the RFP, the BOE retained sole discretion whether to consider these alternatives and to select the proposal option under which the PPA, if any, will be awarded.

As set forth in the RFP, the Successful Respondent and the BOE will enter into a 15-year PPA under which the BOE will purchase all electricity produced from the System at a rate per kWh. Production will be guaranteed by the Successful Respondent. Pursuant to law, the PPA price must be lower than the delivered cost of power from the local electric utility company; i.e. Public Service Electric & Gas ("PSE&G"). This PPA structure provides the BOE with a reduction in its energy expenditures and minimizes the uncertainty that may result from price increases in the electricity market during the 15-year term of the PPA, in addition to other environmental and educational benefits that may be realized by the BOE. At the conclusion of the PPA Term, the BOE will have three options; the default option is for the Successful Respondent or system owner to remove the system at their cost, the BOE will have the option to purchase the systems at a fair market value, and, if the law allows, an option for continued or renewed PPA. These last two options may result in potentially, significant long-term savings for the remaining life of the equipment.

To evaluate proposals, the BOE organized an evaluation team comprised of Administration personnel and supporting legal and energy professionals (collectively, "Evaluation Team"). The Evaluation Team developed the RFP and evaluation criteria, administered the procurement process (including site visits, RFP addenda, and written Q&A), determined legal completeness and technical compliance of the proposals received, conducted interviews with proposing teams, completed a detailed economic analysis, performed a collective evaluation and proposal ranking by consensus, and drafted this consensus-based Evaluation Report for consideration by the BOE in making an award decision. Evaluation of the proposals was based on point-ranking in a variety of categories, including financial benefits, technical design and approach factors, Respondent experience, and other factors as defined in the Evaluation Matrix included in the RFP[1].

The BOE received proposals from four (4) solution providers (hereafter referred to as "Respondents") on November 27, 2019 in response to the RFP, including:

- Advanced Solar Products (ASP)
- Standard Solar / EZnergy (EZnergy)
- Greenskies / Ferreira (Ferreira)
- HESP Solar (HESP)

Following a legal and preliminary economic review, all proposals were considered complete and legally compliant with the requirements of the RFP. The Evaluation Team completed interviews of all four (4) Respondents. The Evaluation Team conducted a detailed technical and economic

[1] In accordance with the Competitive Contracting requirements of the Public School Contracts Law, the Evaluation Matrix was developed and published prior to the receipt of proposals in response to the RFP.

analysis, experience review, formal ranking of the proposals as per the evaluation criteria published in the RFP, and development of this Evaluation Report.

The Evaluation Team developed a consensus ranking of each proposal within each evaluation category, leading to an overall score for each proposal between 0 and 100. The proposal with the highest score represents the strongest weighted-balance of all factors considered. Based on information contained within the proposals, and additional information collected during the oral interviews, the Evaluation Team scored the four (4) proposals in accordance with the evaluation criteria specified in the RFP. Table 1 below summarizes the scores for each of the proposals:

Table 1: Evaluation of Proposals

Respondent	Option	PPA Rate ($/kWh)	Annual Escalation Rate	Score
ASP	1	$0.0430	1.75%	83
ASP	ALT 1	$0.0368	1.75%	79
EZnergy	1	$0.0379	0.00%	71
EZnergy	ALT 1	$0.0347	1.50%	71
Ferreira	1	$0.0195	1.50%	51
HESP Solar	1	$0.0590	1.80%	82

Economic merit, particularly regarding savings through reduced utility bill payments, was evaluated in detail for each proposal. All of the four proposals received for the mandatory Option 1 provide savings, measured as the difference between the solar PPA rate and what it would cost to purchase the same electricity from the utility. Both of the proposed alternative options provide savings.

The Evaluation Team did consider and evaluate the alternative proposals provided by Respondents. Advanced Solar Products submitted one alternative proposal with a variation in type of racking system and construction process. Standard Solar / EZnergy provided one alternative proposal option that kept the locations and sizes of the Systems the same as the RFP requested options, except that the alternative proposals had a lower PPA rate and a 1.5% annual escalator. The alternative proposal were evaluated in the same manner and process as the mandatory Option 1 proposals received.

The strongest ranked proposal is the mandatory Option 1 proposal from Advanced Solar Products with 83 points and provides savings of approximately $39,699 in the first year, approximately $85,118 in the second year, and an approximate 15-year net present value (NPV) of savings of $1,197,437.

The Evaluation Team finds that the received proposals deliver meaningful savings for the BOE, are competitive with current market practice, and deliver other benefits that are significant. All compliant proposals were ranked by the Evaluation Team, based on consideration of price and other factors. Based on the Evaluation Team's conclusions and the points allocated as described

in the previous sections of this report, the proposals under Option 1 present the best opportunity for savings and the avoided capital projects. Advanced Solar Products received the highest score and provides the most overall benefit with the least overall risk to the BOE. The Evaluation Team recommends awarding the PPA to the highest ranked Respondent, Advanced Solar Products.

1. Overview of the RFP

On October 30, 2019, the BOE issued an RFP for a PPA for electricity generated by the System to be financed, designed, installed, owned, operated and maintained by the Successful Respondent on the Middlesex County Vocational and Technical Schools Piscataway Campus. The BOE sought proposals for a mandatory "Option 1" as set forth in Article II of the RFP, which included only ground-mounted systems to be developed at the tennis court/picnic area, south parking lot, along Preston avenue, and a walkway. The BOE also encouraged, but did not require, Respondents to submit proposals for an additional option.

The Successful Respondent and the BOE will enter into a PPA for 15 years, the maximum duration permitted by State law, under which the BOE will purchase the electricity produced from the System at a fixed rate per kWh. The PPA rate must be less than the local utility electric tariff in the initial year of the term for the project to be awarded. It is anticipated that the Successful Respondent will finance the project through a combination of revenues derived from the sale to the BOE of the electrical output of the System, the sale of Solar Renewable Energy Certificates ("SRECs") in the competitive SREC market, federal tax benefits (i.e. both investment tax credits and accelerated depreciation) and investor capital. At the end of the PPA term, the BOE will have the three options; (a) have the System removed at the Successful Respondent's expense; or (b) renegotiation of an extension of the PPA, if allowable by law; or (c) purchase the System by the BOE at fair market value ("FMV").

Proposals were to be evaluated on the basis of price and non-price criteria, in accordance with competitive contracting provisions of the Public School Contracts Law, specifically, N.J.S.A. 18A:18A-4.1(k); LFN 2008-20, dated December 3, 2008, *Contracting for Renewable Energy Services*; BPU protocol for measuring energy savings in PPA agreements (*Public Entity Energy Efficiency and Renewable Energy Cost Savings Guidelines, dated February 20, 2009*); LFN 2009-10, dated June 12, 2009, *Contracting for Renewable Energy Services: Update on Power Purchase Agreements,* and all other applicable law. Components of the RFP are as follows:

a) Solar Systems Size

A preliminary feasibility assessment was performed by the BOE's energy consultant, Gabel Associates, to identify the technical potential for a solar system at the BOE. Based upon this conservative, preliminary assessment, the System was estimated to have a total capacity of approximately of 2.2-2.4 MW DC depending on the areas included and design approach. The preliminary system size was capped at 90% of the facility's previous 12 months of On-Peak electricity usage. The RFP required that all proposals not exceed this 90% of the Baseline On-Peak Annual Usage cap.

The Respondents were provided with twelve (12) months of electric usage data and utility tariff information for the facilities included. The RFP also included conceptual layout designated the areas of the property that are available for the installation of solar arrays based on discussion with the BOE and its professionals.

b) Pricing and Other Commercial Requirements

The RFP required the Respondents to propose with system sizes, production guarantees, a PPA Price, and an annual escalation rate, if any, for every proposal submitted. In addition, all Respondents were required to provide a price adjustment factor to account for any increase in project development cost and unforeseen electrical interconnection or structural improvement costs. These adjustment factors provide a controlled way for unforeseen cost changes to be handled after award, if required.

Proposals were required to include the following information about each Respondent:

- Proposal PPA Price Quotation Sheets
- Respondent Information/Cover Letter
- Consent of Surety
- Form of Construction Performance Bond
- Agreement for Proposal Security in Lieu of Proposal Bond
- Proposal Bond
- Ownership Disclosure Statement
- Non-Collusion Affidavit
- Consent to Investigation
- Statement of Respondent's Qualifications
- Acknowledgement of Receipt of Addenda
- Affirmative Action Compliance Notice/Mandatory EEO Language
- Disclosure of Investment Activities in Iran
- Proposal Checklist

The RFP also contained specific standard terms that were to be included in the PPA agreement, as well as standard requirements for proposal and construction bonding, insurance, etc.

c) Technical Requirements

The RFP provided technical requirements as well as special site conditions as a preliminary guide for the Respondents' proposed System. These Exhibits were used as the minimum requirements to satisfy the RFP.

Prior to the release of the RFP, the BOE's energy consultant, Gabel Associates, did not contact the local electric distribution company, Public Service Electric & Gas (PSE&G), to inquire about interconnection difficulty. Currently the BOE does not have a reason to anticipate interconnection issues. This is a preliminary finding and not definitive; the only way to determine whether a solar project can be interconnected is to file an interconnection application once detailed designs are prepared.

d) Evaluation Process

To evaluate proposals, the BOE organized an evaluation team comprised of: Dianne Veilleux, Superintendent; Karl Knehr, Business Administrator/Board Secretary; Francis Cap, Director of

Buildings and Grounds; Ted Del Guercio III, Esq., of McManimon, Scotland & Baumann; and Andrew Conte, CEM of Gabel Associates (collectively, "Evaluation Team"). The Board's Solar Committee assisted with the development of the RFP and provided support during the process. The Evaluation Team developed the RFP, administered the procurement process (including site visits, RFP addenda, and written Q&A), determined legal completeness and technical compliance of the proposals received, conducted oral interviews with proposing teams, completed a detailed evaluation and proposal ranking, and drafted this consensus Evaluation Report for consideration by the BOE in making an award decision.

The following milestones summarize the RFP development and evaluation process:

- 10/30/19 – RFP Issued
- 10/31/19 – Formal Written Addendum No. 1 and Q&A No. 1 Issued
- 11/08/19 – Pre-proposal Conference and Site Tours
- 11/14/19 – Formal Written Addendum No. 2 and Q&A No. 2 Issued
- 11/20/19 – Formal Written Q&A No. 3 Issued
- 11/27/19 – Proposals Received
- 12/03/19 – Oral Interviews with Compliant Respondents
- 12/06/19 – Meeting of Evaluation Team to Rank Proposals
- 12/09/19 – Evaluation Report Issued
- 12/11/19 – Meeting with the BOE

2. Responses to the RFP

The BOE received and evaluated four (4) compliant proposals in response to the RFP as outlined in Table 2. Each Respondent consisted of a team made up of, at a minimum, a project developer (typically the PPA Provider) and an Engineering, Procurement and Construction ("EPC") company. Under this structure, the PPA Provider is responsible for the financing, design, permitting, acquisition, construction, installation, operation and maintenance of the Systems. To accomplish this task, the PPA Provider will contract with an EPC to complete the required engineering and construction work.

Table 2: Overview of Respondent Teams

PPA Provider	EPC
Advanced Solar Products	Advance Solar Products
Standard Solar	EZnergy
Greenskies	Ferreira / Vanguard Energy Partners
HESP Solar	HESP Construction

The proposals provided all the necessary documentation as required of Respondents by the RFP. Table 3 provides an overview of the proposals that were submitted to the BOE.

Table 3: Overview of Received Proposals

Respondent	Option	Total Size (kW DC)	PPA Rate ($/kWh)	Annual Escalation Rate
ASP	1	2,277.72	$0.0430	1.75%
ASP	ALT 1	2,229.46	$0.0368	1.75%
EZnergy	1	1,405.25	$0.0379	0.00%
EZnergy	ALT 1	1,405.25	$0.0347	1.50%
Ferreira	1	2,028.16	$0.0195	1.50%
HESP Solar	1	1,389.75	$0.0590	1.80%

Attachment 1 is a detailed summary of the key information from the proposal submitted by each responsive proposing team.

3. Decision Making Strategy and Proposal Evaluation Criteria

Evaluation of the proposals was based on percentage ranking in a variety of categories, including economic benefit, technical proposal, experience and qualifications, and commercial terms. The full Evaluation Team developed a consensus ranking of each proposal within each evaluation category, leading to an overall score for each proposal between 0 and 100. The proposal with the highest score represents the strongest weighted balance of all factors considered.

Economic merit, as determined by projected net savings realized by the project, was a dominant factor in the evaluation. As allowed by Competitive Contracting law, it is not the only factor considered in the evaluation. Other considerations, such as risk, design merit, and experience, as well as educational value, are also part of the evaluation. The strongest ranked proposal is based on a combination of relative economic strength along with these other factors.

The Evaluation Criteria used for proposal ranking, which was also included in the RFP, is as follows:

- **Economic Benefit (40 points)**
  The per kWh price, the rate of escalation, system size, and guaranteed production will be considered in the determination of the most economically beneficial proposal over the 15 - year term of the PPA using the net present value of potential savings as calculated by the BOE's evaluation team.

- **Technical Proposal (design, material specifications, installation plan) (30 points)**
  The technical proposal will include an evaluation of the major system components and their specific compliance with the minimum standards listed in the RFP. Also, the Proposal design of the Solar Energy System 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 integration with the site.

- **Experience and Qualifications (20 points)**
  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 in New Jersey.

- **Commercial Terms (10 points)**
  The commercial terms included in the form PPA and proposal supplied by the Respondents in response to this RFP, including any material changes or requested changes to the mandatory terms and conditions included in this RFP.

Where the percentage is valued at one point per percent (ie: 10% = 10 points) in this evaluation report.

The Evaluation Criteria scoring for each proposal Option and Alternate Options are provided in **Attachment 2**. The following sections of this Evaluation Report provide a review of the evaluation criteria for each Respondent and its associated proposal.

4. Evaluation: Economic Benefit

The BOE realizes economic benefits from the installation of a solar project through the energy costs savings generated by purchasing electricity from the solar project through a PPA at a cost lower than the cost of electricity that would otherwise be delivered by and/or purchased from the local electric utility (otherwise referred to as 'grid-sourced' electricity).

To calculate the estimated energy cost savings for the BOE, Gabel Associates prepared a forecast of delivery rates under the local utility tariff rate for Public Service Electric & Gas ("PSE&G") and added the forecasted electricity supply costs. Supply costs were evaluated based on both forecasted third-party supplier rates and Basic Generation Service rates ("BGS" or default service). The forecasted total electricity costs calculated as if the BOE continued the current purchasing strategy over the next fifteen (15) years was compared to the total electricity costs calculated if the BOE were to move ahead with the solar project inclusive of the PPA rates proposed by each Respondent and the reduced, remaining utility & third-party supplier electricity purchases.

Gabel Associates' forecasts of the local utility delivery tariff rates and the cost of grid-sourced power is the result of a detailed analysis of the delivery tariff and the market costs for power supply, by component, over the term of the PPA. The BOE currently purchases electricity through a third-party supplier cooperative pricing system, and the economic analysis has included the current contract costs as well as forecasted third-party supplier costs over the term. This detailed analysis takes into account the following factors:

1. The components of the utility delivery tariff rate that are not avoided as a result of the solar installation. For example, the customer charge and the major portion of the demand charges are not avoided through the purchase of solar energy generated by the System.
2. The components of grid-sourced power supply costs that are only partially avoided by a solar installation; for example, peak capacity and transmission obligations.
3. The most recent energy market fundamentals (i.e., New York Mercantile Exchange ("NYMEX") futures, Energy Information Administration ("EIA") long term escalation rates, and environmental and Renewable Portfolio Standard ("RPS") programs such as the SREC program) are incorporated to provide the best indication of future energy market prices.
4. The expiration date of the current third-party supplier contract and future third-party supply rate trends. Third party supply rates after the expiration of the current contract were calculated as a discount from BGS rates to conservatively estimate the potential savings from a third-party supplier contract (as compared to BGS). The third-party supply rate discount in our analysis reflects an expectation of a diminishing disparity between the two rates over time.
5. The impact of future energy costs as a result of national, state, and regional environmental initiatives.
6. The impact that general energy market escalations will have upon long-term energy prices.
7. The most recent SREC market forecasted prices

All Proposal Options were evaluated based on the Net Present Value ("NPV") of the total savings over the PPA term, which is a widely adopted methodology that recognizes the time value of money and the opportunity cost of money, to the BOE. To calculate the NPV benefits provided by each proposal, Gabel Associates utilized the Respondent's proposed guaranteed ninety percent (90%) of estimated solar production during the term of the PPA multiplied by the per-kwh savings (difference between the solar PPA rate and the average cost of grid-sourced power avoided by on-site solar generation – otherwise referred to as the 'solar price-to-compare'). All savings in future years are discounted back to present value using a 5% discount rate, consistent with standard accounting practices for NPV calculations. Note that NPV is a function not just of the first year PPA rate and the annual escalator, but also of the size of the System and the fraction of the utility purchase displaced by solar generation.

Gabel Associates' economic evaluation, based on the sources and factors listed above, utilized current utility tariff prices and current energy market conditions and applied assumed annual escalation rates for different portions of the distribution tariff and grid-sourced power supply components, in order to compare each of the PPA pricing proposals to electricity costs under a 'non-solar' electricity price scenario. All proposals were benchmarked against the same 'non-solar' electricity price scenario. In preparation of the forecast of the future prices for grid-sourced electricity, the annual escalation rates applied to the various cost components range conservatively from a low of 0.0% (flat) to as high as 3.0%. The economic evaluation considered first and second-year and annual nominal (non-discounted) savings, as well as the NPV of total savings over the full 15-year term. Please see Attachment 3 for a summary of the economic analysis results.

It is important to note that there are certain charges in the BOE's electricity utility tariffs that will not be impacted in the first year but will be in the second year of operation. This mostly relates to capacity, transmission, and other demand-based charges that are set based on the maximum measurement from the previous 12-months. As such it takes 12-months for the reduction from the installed solar project to impact the electricity bills. This is reason for the increase from the first-year to second-year savings.

For this analysis the third-party supplier contract is assumed to expire in June 2020, before or at the time of the installation of the System. Once the solar project is in service, it may be prudent to review the BOE's contract for the third-party supply for this particular electric account and consider a transition back to default supply (known as BGS) at the end of the BOE's current contract commitment. While the cost benefit analysis suggests that this would be the best course of action for the BOE to maximize savings from net metering, the final decision can be made as the project nears commercial operation. The savings calculated from the economic analysis was determined based on the most likely scenario: a comparison of forecasted BGS supply costs for the remaining electricity purchased by the BOE after the installation of solar to forecasted third party supply costs for electricity (calculated as discount from forecasted BGS supply rates), if the BOE continued the current purchasing strategy without solar.

In addition to the installation of solar, the RFP required respondents to include the cost and work associated with removing the trees, tennis courts, and parking lot pavement in the project area and replanting trees elsewhere on site and grass beneath the arrays. This demolition and

landscaping are capital projects that when included in the solar project cost lead to an avoided cost savings for the BOE.

Currently the New Jersey solar incentive and solar market are in transition between the legacy SREC program and new transition and successor programs. This project will likely apply for the current SREC Registration Program but may not reach operation until after the start of the Transition Incentive Program. The Transition Incentive Program includes a securitized REC based incentive market with project producing RECs for the first 15-years of operation. While the value of the incentive for this project is less lucrative under the Transition Incentive Program than the SREC Registration Program, there will still be substantial value and less risk in the Transition Incentive Program. All Respondents confirmed during interviews that their proposed PPA rates would not change if the SREC program ends and a the project ends up in the new, less lucrative Transition Incentive Program.

The Evaluation Criteria contains forty (40) points for Economic Benefit, which are awarded proportionally based on 15-year NPV of the solar price compare analysis of the proposed system sizes and guaranteed production values. The proposal with the highest NPV is awarded the full 40 points for economic merit, and the remaining projects are awarded points in proportion to their savings NPV relative to the best proposal in the group.

The BOE received; four (4) proposal submissions for the mandatory Option 1, and two (2) alternative proposal submissions.

Of the proposal submissions received by the BOE, Greenskies / Ferreira had the highest NPV and was awarded 40 points. The alternative proposal from Advanced Solar Products (ASP) had the second best NPV and was awarded 31 points. Advanced Solar Products' mandatory Option 1 proposal had the next highest value of savings and was awarded 27 points. Both proposal submissions from Standard Solar / EZnergy had similar NPV and each was awarded 25 points. HESP Solar had the lowest NPV of all proposal submissions and was awarded 14 points.

5. Evaluation: Technical Proposal

The evaluation of the Technical Proposal section caries thirty (30) points in the evaluation. The Technical Proposal Section has three (3) major objectives:

- Design
- Material Specification
- Installation Plan

Each of these areas will be discussed and reviewed with an overall rating to be given for the Respondent's Technical Proposal.

None of the respondents included in their proposals any discussion of mitigating the potential overheating and space issues in the electrical room. Therefore, all Respondents' lost points for not addressing this issue which was identified in the RFP.

A part of the criteria for the Technical Proposal category is whether the proposed designs optimize production. In the RFP it was requested that Respondents provide a design that would provide 90% of the historic on-peak consumption. The production of energy from solar projects coincides with the on-peak time periods in the PSE&G tariff rate class 70% of the time. Therefore, an optimal system size could have an estimated production greater than 90% of the historic on-peak consumption. None of the guaranteed production values proposed by the Respondents and used in the economic assessment and this assessment of "optimized production", exceeded this 90% of historic on-peak consumption upper limit. The percent of the historic on-peak consumption satisfied by the Respondents' proposed systems varied from proposal to proposal. This differentiation was used in this technical assessment.

Advanced Solar Products:

The Evaluation Team compared the total system size for Option 1 of 2,277.72 kW DC and Alternate Option 1 of 2,229.46 kW DC. Advanced Solar Products' proposed system layouts were compared to the conceptual site plan layout that was provided as part of the RFP and were found to be compliant with the provided boundaries.

Advanced Solar Products' proposed Option 1 has a guaranteed output of 2,716,181 kWh and Alternate Option 1 has a guaranteed output of 2,658,679 kWh. All proposed options represent 90% of the expected total system output as guaranteed output. Advanced Solar Products provided the PVWatts calculations for the systems substantiating the production calculations, below is a summary of the estimated production in their proposal. Advanced Solar Products' proposed system's estimated guaranteed output would provide 86-88% of the historic on-peak consumption of this facility.

Proposal Option	Total System Size (kW DC)	Expected Total System Output (kWh)	Guaranteed Total System Output (kWh)
Option 1	2,277.72	3,017,979	2,716,181
Alt. Option 1	2,229.46	2,954,088	2,658,679

Advanced Solar Products' proposed equipment from the proposal and compliance to specifications are as follows:

Advance Solar Products: Major System Components

System Component	Manufacturer	Compliance with Project Technical Specifications
PV Modules	Phono Solar – PSM380M – 380 W	Yes
Inverters	Chint Power Systems – CPS – String Inverters	Yes
Racking System	RBI – Driven Post – GM-2 Aerocompact – Ballasted – Compact Ground G15*	Yes
DAS	AlsoEnergy	Yes

*This racking system is used in Alternate Option

Advance Solar Products confirmed the use of Tier 1 materials, either those listed above or equivalent. Advance Solar Products' equipment selection complied with the RFP.

Advance Solar Products Alternate Option plans to use a ballasted system in the tennis court and parking lot areas provided in the RFP. The Alternative Option also indicates that the tennis court and parking lot areas will not be removed and planted with grass until the end of the PPA. The Evaluation Team did not find that this approach allowed for proper access to the areas beneath the arrays and create a risk of whether the paved areas would be demolished as expected.

The proposed project schedule from Advance Solar Products was for a six to eight-month time from execution of the agreement to operation. This schedule demonstrated a comprehensive approach to the project with the goal of expediency and optimal value for all parties. The Evaluation Team found this schedule to demonstrative of a beneficial approach to the project that was not found in other proposed schedules.

Given the Evaluation Team's assessment and in comparison to the other Respondents, the Evaluation Team awarded Advanced Solar Products for Option 1 with twenty-eight (28) and for Alternate Option twenty (20) out of the thirty (30) possible points for the Technical Proposal portion of the evaluation.

Standard Solar / EZnergy:

The Evaluation Team compared the total system size for both Option 1 and Alternate Option 1 of 1,405.25 kW DC. Standard Solar / EZnergy's proposed system layout was compared to the

conceptual site plan layout that was provided as part of the RFP and was found to be compliant with the provided boundaries. The proposed system layout did not optimize the use of the space.

The Standard Solar / EZnergy's proposed Option 1 and Alternate Option 1 has a guaranteed output of 1,684,614 kWh. All proposed options represent 90% of the expected total system output. Standard Solar / EZnergy used PVwatts for their production estimates, below is a summary of the estimated production in their proposal. Standard Solar / EZnergy's proposed system's estimated guaranteed output would provide 55% of the historic on-peak consumption of this facility.

Proposal Option	Total System Size: (kW DC)	Expected Total System Output: (kWh)	Guaranteed Total System Output: (kWh)
Option 1	1,405.25	1,871,793	1,684,614
Alt. Option 1	1,405.25	1,871,793	1,684,614

Standard Solar / EZnergy's proposed equipment from the proposal and compliance to specifications are as follows:

Standard Solar / EZnergy: Major System Components

System Component	Manufacturer	Compliance with Project Technical Specifications
PV Modules	Hanwha – 385 W	Yes
Inverters	Chint or Solectria – String Inverter	Yes
Racking System	GenMounts – Ballasted Solar Racking System	Yes
DAS	Locus Energy (AKA – AlsoEnergy)	Yes

Standard Solar / EZnergy confirmed the use of Tier 1 materials, either those listed above or equivalent. Standard Solar / EZnergy's equipment selection are in compliance with the RFP.

Standard Solar / EZnergy did not consider the potential for landscaping costs, but did propose with a contingency in the budget developed to formulate their proposal and that contingency would be made available for replanting trees. Standard Solar / EZnergy's proposed schedule was for six to twelve months from execution of the agreement to operation.

Given the Evaluation Team's assessment and in comparison to the other Respondents, the Evaluation Team awarded the Standard Solar / EZnergy team twenty (20) out of the thirty (30) possible points for both options for the Technical Proposal portion of the evaluation.

Greenskies / Ferreira:

The Evaluation Team compared the total system size for Option 1 of 2,082.16 kW DC. Greenskies / Ferreira's proposed system layout was compared to the conceptual site plan layout that was provided as part of the RFP and was found to be compliant with the provided boundaries.

The Greenskies / Ferreira's proposed Option 1 has a guaranteed output of 2,325,893 kWh which represents 90% of the expected total system output as guaranteed output. Greenskies / Ferreira provided the PVWatts calculations for the systems substantiating the production calculations, below is a summary of the estimated production in their proposal. Greenskies / Ferreira's proposed system's estimated guaranteed output would provide 75% of the historic on-peak consumption of this facility.

Proposal Option	Total System Size (kW DC)	Expected Total System Output (kWh)	Guaranteed Total System Output (kWh)
Option 1	2,082.16	2,584,326	2,325,893

Greenskies / Ferreira's proposed equipment from the proposal and compliance to specifications are as follows:

Greenskies / Ferreira: Major System Components

System Component	Manufacturer	Compliance with Project Technical Specifications
PV Modules	GCL – Saturn Series – GCL-M6/72-385 – 385 W	Yes
Inverters	Chint – CPS SCH 125KTL – String Inverters	Yes
Racking System	RBI – Driven Post – GM2	Yes
DAS	AlsoEnergy	Yes

Greenskies / Ferreira confirmed the use of Tier 1 materials, either those listed above or equivalent. Greenskies / Ferreira's equipment selection complied with the RFP.

Greenskies / Ferreira did not include any contingency for replanting trees that will be removed to allow for the installation of the system as required by local municipal ordinance. Greenskies / Ferreira's proposed schedule from execution of the agreement to operation was nine to eleven months.

Given the Evaluation Team's assessment and in comparison to the other Respondents, the Evaluation Team awarded Greenskies / Ferreira with twenty-one (21) out of the thirty (30) possible points for the Technical Proposal portion of the evaluation.

HESP Solar:

The Evaluation Team compared the total system size for Option 1 of 1,389.75 kW DC. HESP Solar's proposed system layout was compared to the conceptual site plan layout that was provided as part of the RFP and were found to be compliant. HESP Solar's proposed conceptual layout did not include one of the areas provided as part of the RFP. HESP Solar's proposed system layout did not optimize the use of the available space.

The HESP Solar's proposed Option 1 has a guaranteed output of 1,662,977 kWh which represents 90% of the expected total system output as guaranteed output. HESP Solar provided the PVWatts calculations for the systems substantiating the production calculations, below is a summary of the estimated production in their proposal. HESP Solar's proposed system's estimated guaranteed output would provide 54% of the historic on-peak consumption of this facility.

Proposal Option	Total System Size (kW DC)	Expected Total System Output (kWh)	Guaranteed Total System Output (kWh)
Option 1	1,389.75	1,847,752	1,662,977

HESP Solar's proposed equipment from the proposal and compliance to specifications are as follows:

HESP Solar: Major System Components

System Component	Manufacturer	Compliance with Project Technical Specifications
PV Modules	Trina Solar – TSM-DE14A(11) – 375 W	Yes
Inverters	Yaskawa-Solectria – PVI – String Inverters	Yes
Racking System	Patriot Solar Group – Driven Post – Atlas	Yes
DAS	Locus Energy (AKA – Also Energy)	Yes

HESP Solar confirmed the use of Tier 1 materials, either those listed above or equivalent. HESP Solar's equipment selection complied with the RFP.

The proposed route for the conduit provided by HESP Solar included additional distance and trenching that would be unnecessary for reaching the electrical room.

Given the Evaluation Team's assessment and in comparison to the other Respondents, the Evaluation Team awarded HESP Solar with fifteen (15) out of the thirty (30) possible points for the Technical Proposal portion of the evaluation.

6. Evaluation: Experience and Qualifications

The evaluation of the Experience and Qualifications section carries twenty percent (20%) weighting in the evaluation.

Each Respondent was evaluated on 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 in New Jersey. In addition, qualifications were judged not only on the submitted information but on the Respondent's presentation during the in-person interviews

Advanced Solar Products:

Advanced Solar Products will be providing the project management services for this project. Advanced Solar Products has verifiable experience with completing projects in a timely manner and maintaining project schedules. Advanced Solar Products stated that the project manager for this project has been involved since the development of the proposal and will remain involved through the completion of construction. Advanced Solar Products will schedule weekly meetings and provide traffic, health & safety, and staging plans prior to the start of construction.

Advanced Solar Products has extensive experience with developing, constructing, and operating solar projects. Advanced Solar Products will be using Lighton Industries for the construction portion of this project. Lighton Industries has completed several school installations in New Jersey, an extensive list of their completed projects was included in their Proposal. Lighton Industries completed projects include:

- Toms River School District, Toms River, NJ (7 Schools)
- Delaware Valley Regional High School (1 School)
- Lawrenceville Prep School, Lawrenceville, NJ
- Raritan Center, Edison, NJ
- Costco, Manahawkin, NJ

The Advance Solar Products has been awarded many school districts solar PPA's and have successfully completed all the projects which they have been awarded.

Advanced Solar Products will provide the operations and maintenance service. Maintenance response time for normal calls is within 24 hours and emergency maintenance response is within 4 hours of a call. Advanced Solar Products indicated they would perform an annual service inspection of the system.

In comparison to the other Respondents, the Evaluation Team awarded Advanced Solar Products with nineteen (19) out of the twenty (20) possible points for the Experience and Qualifications portion of the evaluation.

Standard Solar / EZnergy:

The Standard Solar / EZnergy proposal included only that they would provide technical information upon award. During the interview the evaluation team requested a single line diagram from the Standard Solar / EZnergy team to show they have a good understanding of how the interconnection to the facility will be made.

The Standard Solar / EZnergy team indicated that EZnergy will be providing the project management services, with oversite provided by Standard Solar. EZnergy has verifiable experience with completing projects in a timely manner and maintaining project schedules. EZnergy will have an on-site project manager during construction. EZnergy will schedule weekly construction update meetings and will provide staging plans prior to the start of construction.

Standard Solar / EZnergy will be using EZnergy as the EPC. Standard Solar is relatively unknown in the New Jersey public entity solar market. EZnergy has completed several projects in New Jersey including:

- Brick Landfill, Brick, NJ
- Readington School District, Readington, NJ (3 Schools)
- Willingboro Township, Willingboro, NJ (6 Schools)
- Tenafly School District, Tenafly, NJ (3 Schools)

The Standard Solar / EZnergy team has not been awarded any solar projects as a team and Standard Solar has not entered into any PPA solar projects with any public entity in New Jersey.

In comparison to the other Respondents, the Evaluation Team awarded The Standard Solar / EZnergy team with seventeen (17) out of the twenty (20) possible points for the Experience and Qualifications portion of the evaluation.

Greenskies / Ferreira:

The Greenskies / Ferreira team indicated they will be using Ferreira's wholly owned sister company Vanguard Energy Partners to provide the EPC function on this project. Vanguard Energy Partners has an extensive list of both public and private projects. Vanguard Energy Partners have completed projects at:

- Bridgewater Raritan School District, Bridgewater, NJ (4 Schools)
- Somerville School District, Somerville, NJ (3 Schools)
- Warren Township DPW Building, Warren, NJ
- Bridgewater Municipal Building, Bridgewater, NJ
- Mount Holly Water Pollution Control Facility, Mount Holly, NJ

The Greenskies / Ferreira team indicated that Vanguard Energy Partners will be providing the project management services for this project. Vanguard Energy Partners has verifiable experience with completing projects in a timely manner and maintaining project schedules.

Vanguard Energy Partners will utilize a pre-construction project manager to be responsible for the successful completion of pre-construction activities, and will have full-time, on-site construction project manager. Vanguard Energy Partners will schedule weekly meetings and provide traffic, health & safety, and staging plans prior to the start of construction.

While Vanguard Energy Partners have completed numerus projects and maintains numerus projects in the state of New Jersey, the Greenskies / Ferreira team has not executed a PPA together. In addition, the Respondents' presentation during the in-person interview did not inspire confidence.

In comparison to the other Respondents, the Evaluation Team awarded The Greenskies / Ferreira team with fourteen (14) out of the twenty (20) possible points for the Experience and Qualifications portion of the evaluation.

HESP Solar:

HESP Solar indicated that HESP Construction will be the EPC firm for this project. HESP Construction provides EPC services solely to HESP Solar and will serve as a project manager, oversee engineering and construction. Additional work is proposed to be completed by a structural and electrical engineering firm licensed in the state of New Jersey and other subcontractors which were not identified in HESP's proposal.

HESP Solar has completed several solar projects in New Jersey including the following:

- South Brunswick School District, South Brunswick, NJ (14 Schools)
- Stafford School District, Stafford, NJ (5 Schools)
- Jackson Landfill, Jackson NJ
- Tenafly School District, Tenafly, NJ (3 Schools)
- Plumsted School District, New Egypt, NJ (2 Schools)
- Manchester & Haledon School Districts, Haledon, NJ (2 Schools)

HESP Solar indicated they will be self-performing the operation and maintenance for this project. They will be using their real-time monitoring system to track key performance indicators and will respond quickly in the event of a component failure. HESP Solar anticipates a minimum of two service inspections per year.

The Respondents' presentation during the in-person interview did not inspire confidence.

In comparison to the other Respondents, the Evaluation Team awarded The HESP Solar team with fourteen (14) out of the twenty (20) possible points for the Experience and Qualifications portion of the evaluation.

7. Evaluation: Commercial Terms

The commercial terms included in the form PPA and proposal supplied by the Respondents in response to this RFP, including any material changes or requested changes to the mandatory terms and conditions included in this RFP, were evaluated under this section. The evaluation of the Commercial Terms carries 10% of the weighting of the evaluation.

Each Respondent was evaluated on the following commercial factors:

- Production Guaranty
- Requested PPA changes
- Risk of Ownership Change

Each of these areas are discussed and reviewed below, but all of these factors were used in the evaluation of the Respondents' proposals. The Evaluation Team awards Advanced Solar Products and Standard Solar/EZnergy nine (9) out of ten (10) possible points. Greenskies/Ferreira was awarded seven (7) out of ten (10) possible points due to requested changes to the form PPA and the perceived risk of a change of ownership during the term. HESP Solar was awarded eight (8) out of a ten (10) possible points due to the perceived risk of a change of ownership during the term.

a) Production Guaranty

Each of the Respondents were asked to provide a production guaranty. In the industry it is typical for PPA providers to provide a ninety percent (90%) production guarantee (however, some market participants offer higher or lower production guarantees) that is "trued-up" periodically over the term of the PPA. Typically, Respondents provide a three (3) to five (5) year true-up period.

Some PPA providers will provide a schedule of guaranteed production over the term and some will offer a 90% weather-normalized guarantee, in which case the weather-normalization occurs during the true-up calculation and thus potentially reduces or increases the actual percentage below or above 90%.

All Respondents provided a 90% production guaranty and weather normalization over a reasonable true up period.

b) Requested PPA Changes

Each of the Respondents were asked to indicate on the Proposal Quotation Form included in the RFP whether their proposal would require material changes to the Form PPA provided in Appendix A-1 of the RFP. Three (3) Respondents indicated that their proposals do not require any material changes to the Form PPA or that they agreed to include the minimum terms and conditions contained in the RFP in their respective PPA. Greenskies/Ferreira requested a change to a portion of the PPA language.

c) Risk of Ownership Change

Each of the Respondents were asked to indicate the number of projects that they have constructed and continue to own, as well as describe the ownership/financing structure of their proposal. Some Respondents are planning to own the project on their own balance sheet and others are planning to bring in equity or other partners. The Evaluation Team considered this risk in this evaluation.

8. Recommendation

The RFP process attracted a competitive range of proposals. Following a legal and technical review, four (4) proposals were determined to be complete and legally and technically compliant with the requirements of the RFP.

The economic analysis indicates that the solar project will provide substantial savings to the BOE, compared with continuing the current purchase strategy for electricity over the 15-year term. If the BOE decides to purchase the system at the end of the term (based on a fair market value determination), there will likely be strong economic value for the remaining operating life of the equipment (estimated to be an additional 10 years or more). The relatively predictable price of solar electricity also provides a hedge against future price increases of utility supply. Based on these economic considerations, the Evaluation Team believes that the implementation of a solar project would be beneficial for the BOE.

In addition to economics, there will be other benefits to the BOE, including reduced carbon footprint, points in the Sustainable Jersey for Schools program, and a unique asset for student and community engagement. Proposals included educational content, including public displays, outreach efforts, and curriculum content.

The Evaluation Team did consider and evaluate the alternative proposals provided by Respondents. Advanced Solar Products submitted one alternative proposal with a variation in type of racking system and construction process. Standard Solar / EZnergy provided one alternative proposal option that kept the locations and sizes of the Systems the same as the RFP requested options, except that the alternative proposals had a lower PPA rate and a 1.5% annual escalator. The alternative proposal were evaluated in the same manner and process as the mandatory Option 1 proposals received.

The strongest ranked proposal is the mandatory Option 1 proposal from Advanced Solar Products with 83 points and provides savings of approximately $39,699 in the first year, approximately $85,118 in the second year, and an approximate 15-year net present value (NPV) of savings of $1,197,437.

The Evaluation Team finds that the received proposals deliver meaningful savings for the BOE, are competitive with current market practice, and deliver other benefits that are significant. All compliant proposals were ranked by the Evaluation Team, based on consideration of price and other factors. Based on the Evaluation Team's conclusions and the points allocated as described in the previous sections of this report, the proposals under Option 1 present the best opportunity for savings and the avoided capital projects. Advanced Solar Products received the highest score and provides the most overall benefit with the least overall risk to the BOE. The Evaluation Team recommends awarding the PPA to the highest ranked Respondent, Advanced Solar Products.

Attachment 1
Solar Proposal Summary

Middlesex County Vocational and Technical Schools; Piscataway Campus								
Respondent	**Option**	**PPA Rate ($/kWh)**	**Escalation Rate**	**System Size (kW)**	**Expected Output (kWh)**	**Unforseen Costs Adjustment Factor ($/kWh)**		**Project Development Costs Adjustment Factor ($/kWh)**
ASP	1	$0.0430	1.75%	2,277.72	3,017,979	$50,000-$99,999.99	$0.00115	$0.000230
						$100,000-$149,999.99	$0.00345	
						$150,000 and above	$0.00575	
	Alt. 1	$0.0368	1.75%	2,229.46	2,954,088	$50,000-$99,999.99	$0.00118	$0.000236
						$100,000-$149,999.99	$0.00354	
						$150,000 and above	$0.00590	
EZnergy	1	$0.0379	0.00%	1,405.25	1,871,793	$50,000-$99,999.99	$0.00410	$0.000405
						$100,000-$149,999.99	$0.00610	
						$150,000 and above	$0.01010	
	Alt. 1	$0.0347	1.50%	1,405.25	1,871,793	$50,000-$99,999.99	$0.00370	$0.000362
						$100,000-$149,999.99	$0.00550	
						$150,000 and above	$0.00910	
Ferriera	1	$0.0195	1.50%	2,082.16	2,584,326	$50,000-$99,999.99	$0.00160	$0.000300
						$100,000-$149,999.99	$0.00320	
						$150,000 and above	$0.00480	
HESP Solar	1	$0.0590	1.80%	1,389.75	1,847,752	$50,000-$99,999.99	$0.00050	$0.000100
						$100,000-$149,999.99	$0.00100	
						$150,000 and above	$0.00200	

Attachment 2
Proposal Ranking Evaluation Criteria

Company	Total	ASP	ASP	EZnergy	EZnergy	HESP	Ferreira
Option	Possible Points	One	Alt	One	Alt	One	One
Economic Benefit	40	27	31	25	25	14	40
Technical Proposal	30	28	20	20	20	15	21
Experience and Qualifications	20	19	19	17	17	14	14
Commercial Terms	10	9	9	9	9	8	7
Total	100	83	79	71	71	51	82

Attachment 3
Economic Analysis

	Option	PPA Rate ($/kwh)	Escalation Rate	System Size (KWdc)	Guaranteed Production (kWh)	Year 1 Savings	Year 2 Savings	15 Year Savings	15 Year NPV
ASP	1	$0.0430	1.750%	2,278	2,716,181	$39,699	$85,118	$1,813,019	$1,197,437
	Alt. 1	$0.0368	1.750%	2,229	2,658,679	$55,484	$101,120	$2,068,738	$1,372,700
EZnergy	1	$0.0379	0%	1,405	1,684,614	$33,445	$77,629	$1,678,427	$1,105,703
	Alt. 1	$0.0347	1.500%	1,405	1,684,614	$38,836	$82,120	$1,662,857	$1,103,618
HESP Solar	1	$0.0590	1.800%	1,390	1,662,977	-$2,070	$40,270	$957,677	$623,824
GS/Ferriera	1	$0.0195	1.500%	2,082	2,325,893	$90,117	$136,395	$2,630,321	$1,757,578

Attachment 4
Unforeseen Project Cost Adjustment Sensitivity Analysis

	Option	System Size (DC)	Escalation	Adj. Factor-Unforeseen Costs	PPA Rate	Year 1 Savings	15 Year Savings	15 Year NPV
ASP	1	2278	1.750%	$50,000-$99,999.99	$0.04415	$ 36,576	$ 1,761,857	$ 1,162,428
				$100,000-$149,999.99	$0.04645	$ 30,329	$ 1,659,534	$ 1,092,410
				$150,000 and above	$0.04875	$ 24,081	$ 1,557,210	$ 1,022,393
	1 Alt.	2229	1.750%	$50,000-$99,999.99	$0.03798	$ 52,347	$ 2,017,353	$ 1,337,538
				$100,000-$149,999.99	$0.04034	$ 46,073	$ 1,914,583	$ 1,267,215
				$150,000 and above	$0.04270	$ 39,798	$ 1,811,813	$ 1,196,891
Eznergy	1	1405	0.000%	$50,000-$99,999.99	$0.04200	$ 26,538	$ 1,578,355	$ 1,036,143
				$100,000-$149,999.99	$0.04400	$ 23,169	$ 1,529,539	$ 1,002,212
				$150,000 and above	$0.04800	$ 16,431	$ 1,431,908	$ 934,349
	1 Alt.	1405	1.500%	$50,000-$99,999.99	$0.03840	$ 32,603	$ 1,562,560	$ 1,034,833
				$100,000-$149,999.99	$0.04020	$ 29,571	$ 1,513,766	$ 1,001,371
				$150,000 and above	$0.04380	$ 23,506	$ 1,416,179	$ 934,445
Ferreira	1	2082	1.500%	$50,000-$99,999.99	$0.02110	$ 86,396	$ 2,570,438	$ 1,716,510
				$100,000-$149,999.99	$0.02270	$ 82,674	$ 2,510,556	$ 1,675,443
				$150,000 and above	$0.02430	$ 78,953	$ 2,450,674	$ 1,634,375
HESP Solar	1	1390	1.800%	$50,000-$99,999.99	$0.05950	($ 2,901)	$ 944,010	$ 614,476
				$100,000-$149,999.99	$0.06000	($ 3,733)	$ 930,342	$ 605,128
				$150,000 and above	$0.06100	($ 5,396)	$ 903,007	$ 586,432