



Agenda

DEBT AFFORDABILITY ADVISORY COMMITTEE

June 16, 2014

10:00 A.M.

651 Pine Street, 11th Floor, Martinez

Robert Campbell, Auditor-Controller
Lisa Driscoll, County Finance Director
Catherine Kutsuris, Department of Conservation & Development Director
Russell Watts, Treasurer-Tax Collector

Agenda Items:

Items may be taken out of order based on the business of the day and preference of the Committee

1. Public Comment
2. Consider reviewing and approving direct purchase financing for a Regional Renewable Energy Procurement Solar Project (Brian Balbas, Public Works).
3. Consider update from Ed Woo, Department of Information Technology, on lease purchase financing agreements for FY 2014-15 projects (originally presented May 1, 2014).
4. Other Business/Next Meeting – Winter 2014

☺ *The Debt Affordability Advisory Committee will provide reasonable accommodations for persons with disabilities planning to attend Committee meetings. Contact the staff person listed below at least 72 hours before the meeting.*

📁 *Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Committee less than 96 hours prior to that meeting are available for public inspection at 651 Pine Street, 10th floor, during normal business hours.*

✉ *Public comment may be submitted via electronic mail on agenda items at least one full work day prior to the published meeting time.*

For Additional Information Contact:

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Memo

DATE: May 29, 2014

TO: Finance Committee
FROM: ^{FOR} Julia R. Bueren, Director 
SUBJECT: Regional Renewable Energy Procurement Solar Project (R-REP)

Contra Costa County is one of the Bay Area Participating Agencies in the Regional Renewable Energy Procurement (R-REP) project. We were recently notified of the R-REP bid results. Twelve vendors submitted qualified proposals for six out of the 11 bid bundles that were included in the regional Request for Proposal (RFP). Contra Costa County included six sites. As a participant we must take R-REP's results and make recommendations to the Contra Costa County Board of Supervisors by early July. The reason for a relatively tight time frame is the R-REP group is hoping to leverage its size and collaboration in negotiations with the awarded vendors and secure State solar incentives. To capitalize on these incentives, we must meet the July timeframe. This is a report of the results of the bids for the Contra Costa County sites.

BACKGROUND

Engaging in a collaborative procurement process for renewable energy leads to reduction in renewable energy generation systems costs, transaction costs and administrative time, and enhanced leverage for public agencies in the negotiations of renewable energy systems. Contra Costa County will also benefit from the installation of renewable energy through sustained reductions in utility operating costs. In addition, the renewable energy projects will significantly contribute to achieving Contra Costa County's Municipal Climate Action Plan targets for reduced Greenhouse Gas Emissions from government operations.

Each agency participating in the R-REP signed a joint Memorandum of Understanding (MOU). The Board of Supervisors approved the execution of the MOU on December 11, 2012. The MOU defines the roles and responsibilities of the Participating Agencies and enabled the development of the R-REP RFP by Alameda County, as lead agency, and to provide stability to the project during the solicitation process. Nineteen agencies signed the MOU.

Also as part of the preliminary work performed in preparation of the RFP, Participating Agencies had feasibility studies conducted on sites to determine technical adequacy and financial benefit of installing solar power systems. Through this process we selected six sites

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in Contra Costa County to include in the RFP. They are:

- Juvenile Hall, 202 Glacier Drive
- Sheriff Coroner – Forensic Science Center, 1960 Muir Rd.
- Office of Emergency Services, 50 Glacier Drive
- Sheriff Patrol & Investigation, 1980 Muir Rd
- Public Works, 255 Glacier Drive
- West County Health Center, 13601 San Pablo Ave, San Pablo

Alameda County's General Services Agency (GSA) issued a hybrid, two-step solicitation for R-REP. This included a Request for Qualification (RFQ) to identify and prequalify providers of renewable energy power systems for municipal facilities, followed by a RFP from the prequalified bidders. The solicitation was issued by Alameda County GSA in its capacity as Lead Agency and on behalf of the other Participating Agencies, per terms of the MOU. The solicitation included 186 sites that were grouped into 11 bid bundles. Each bid bundle comprised sites from across two or more agencies participating in the R-REP. Twelve vendors submitted qualified proposals for six out of the 11 bid bundles that were included in the RFP. The vendors submitted bids for bundles designated as M1, M2, M3, M4, L1 and BA2. Contra Costa County's sites are all in bundle M3. The RFP required the bidders to provide two forms of pricing providing Participating Agencies the information necessary to determine the procurement opportunity that is in their best interest. Bids included:

1. Power Purchase Agreement Price (PPA) per kilowatt-hour (kWh) – In a Power Purchase Agreement scenario, a solar vendor installs, maintains, and owns the solar system at a County site. The County agrees to purchase all of the electricity generated by the system at a set price. The vendor's \$/kWh price is set for each year over a 20 year term. The benefit comes from obtaining more affordable renewable energy without incurring costs for design, construction and ownership.
2. Direct Purchase Price – This is the full turnkey system price if the County buys the solar system. The County owns, operates, and maintains the system. The Direct Purchase price also includes an annual cost bid for the vendor to operate and maintain the system for 20 years including all warranties and performance guarantee.

One of the main objectives of the R-REP solicitation was to achieve economies of scale through the collaborative procurement strategy. Bidders were required to hold pricing with assumptions that there could be up to 10% movement of sites outside of bundles, anticipating the possibility that some Participating Agencies may decide not to enter into contracts.

Details of the RFP and selection process can be found in the Appendix of this report (see Alameda County GSA's memo to their Board dated April 7, 2014). The following bidders were recommended by the R-REP Selection Committee for award of contracts by R-REP Participating Agencies:

1. Sun Edison, Beltsville, MD - for bid bundles BA2, L1, M1 and M3; and
2. Solar City, San Mateo, CA – for bid bundles M2 and M4.

RESULTS FROM THE R-REP BID

Contra Costa County's six sites are in bid bundle M3 shared with Central Contra Costa Sanitary District, City of Richmond, and City of Walnut Creek. SunEdison's PPA offer is structured around an initial first year energy rate with an annual escalator of 2% over a term of 20 years. The County will be obligated to purchase all electricity produced at a set price. The system is owned by SunEdison. The contract will have an early termination buyout schedule for each year of the term.

The direct purchase offer provides a turn-key design and constructed system which the County will own, operate and maintain. Typically operations and maintenance are contracted out. The R-REP bid includes O&M pricing for 20 years along with a performance guarantee.

Table 1 describes the system data for each site. The proposed system will be the same for a PPA or direct purchase.

	Site	PV Installation Type	System Size (kW DC)	Yr 1 Production (kWh AC)	Solar Load Offset (%)
1	202 Glacier Dr	Canopy	478	604,762	30%
2	50 Glacier Dr	Canopy	169	239,679	33%
3	255 Glacier Dr	Canopy	81	126,547	83%
4	1960 Muir Rd	Canopy	383	567,214	91%
5	1980 Muir Rd	Canopy	228	322,262	87%
6	13601 San Pablo Ave	Canopy	403	604,762	42%
Totals			1,742	2,465,226	51%

Table 2 shows the results of the PPA bid. A comparison of the first year PPA rate shows a discount from the site's average utility electricity rate. The PPA rate will escalate 2% annually.

Table 2: PPA and Utility Rate Comparison

	Site	PG&E Avg. Rate 2013 (\$/kWh)	PPA Rate 1st Year (\$/kWh)	% Δ
1	202 Glacier Dr	\$0.1442	\$0.1300	9.8%
2	50 Glacier Dr	\$0.1356	\$0.1280	5.6%
3	255 Glacier Dr	\$0.1872	\$0.1484	20.7%
4	1960 Muir Rd	\$0.1636	\$0.1300	20.5%
5	1980 Muir Rd	\$0.1550	\$0.1426	8.0%
6	13601 San Pablo Ave	\$0.1506	\$0.1280	15.0%

Table 3 shows the result of the direct purchase bid which includes a 20 year bid for operations and maintenance.

Table 3: Direct Purchase Bid Results

	Site	Full System Price	Cost per Watt	20 Yr. O&M Pricing
1	202 Glacier Dr	\$1,356,389	\$2.84	\$167,056
2	50 Glacier Dr	\$462,647	\$2.74	\$67,492
3	255 Glacier Dr	\$242,155	\$2.99	\$29,667
4	1960 Muir Rd	\$1,048,484	\$2.74	\$139,570
5	1980 Muir Rd	\$656,517	\$2.88	\$82,933
6	13601 San Pablo Ave	\$1,216,165	\$3.02	\$146,717
Totals		\$4,982,357	2.87	\$633,435

PROJECTED COSTS AND BENEFITS

The R-REP team's outside financial and technical advisors performed financial analyses of each of the Participating Agency's sites. The financial analysis compares net present value benefit to the County between the PPA and Direct Purchase options against a business as usual scenario (no project). The analysis covers the 25 year lifecycle for solar systems because at the end of the 20 year PPA term the solar system is still fully functional. It's nearly impossible to predict a buyout price or renegotiated PPA terms 20 years in the future so the analysis assumes a simple five year extension of the base PPA terms, which is a reasonable assumption. The financial analysis assumes a 3% discount rate and 4% annual escalation of PG&E rates. Also it should be noted that the cost of money for a direct purchase in this analysis is assumed to be zero. If a loan or other financing is used for a direct purchase the analysis can be updated. Aggregate and individual site financial summaries are attached to this report.

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The following Tables summarize the relative costs and benefits for each site under each procurement option.

Table 4: Net Present Value of Direct Purchase (Ownership)

OWNERSHIP NET PRESENT VALUE (NPV) CASH FLOW										
	BLDG #	ADDRESS (occupant)	Payback Years	Bill Savings	Construction Costs	Project Mgmt + Contingency	O & M	Total NPV Costs	NPV Rebates	NPV Net Benefit
1	044	202 GLACIER DR (PROB)	11	2,999,175	(1,356,389)	(67,819)	(155,198)	(1,579,406)	287,076	1,706,845
2	035	50 GLACIER DR (SO)	14	617,459	(462,647)	(23,132)	(54,776)	(540,555)	97,835	174,739
3	038	255 GLACIER DR (PW)	9	569,667	(242,155)	(12,108)	(26,427)	(280,690)	51,656	340,633
4	129	1960 MUIR ROAD (SO)	8	2,746,586	(1,048,484)	(52,424)	(124,327)	(1,225,235)	231,533	1,752,884
5	130	1980 MUIR ROAD (SO)	9	1,585,105	(656,517)	(32,826)	(73,876)	(763,219)	131,545	953,431
6	699	13601 SAN PABLO (HSD)	10	2,405,411	(1,216,165)	(60,808)	(130,694)	(1,407,667)	246,860	1,244,604
NPV TOTALS			9	10,923,403	(4,982,357)	(249,117)	(565,298)	(5,796,772)	1,046,505	6,173,136

Table 4 shows an NPV bill savings of \$10.9 million with an overall NPV net benefit (savings) of \$6.2 million. The costs include the direct purchase price and 20 year O&M pricing from the vendor. Costs also include project management and contingency. The County has reservations in for California Solar Incentives (shown as NPV Rebates in the Table) valued at just over \$1 million. These incentives are paid over a five year period based on the power generated by the system.

Table 5: NPV Ownership Compared to NPV PPA

			NPV OWNERSHIP VS PPA			
	BLDG #	ADDRESS (occupant)	Bill Savings	PPA Costs	PPA Net Benefit	Δ NPV Net Benefit Own vs PPA
1	044	202 GLACIER DR (PROB)	2,999,175	(1,868,976)	1,130,199	576,646
2	035	50 GLACIER DR (SO)	617,459	(627,438)	(9,979)	184,718
3	038	255 GLACIER DR (PW)	569,667	(383,981)	185,686	154,947
4	129	1960 MUIR ROAD (SO)	2,746,586	1,507,366)	1,239,220	513,664
5	130	1980 MUIR ROAD (SO)	1,585,105	(939,493)	645,612	307,819



6	699	13601 SAN PABLO (HSD)	2,405,411	(1,583,162)	822,249	422,355
NPV TOTALS			10,923,403	(6,910,416)	4,012,987	2,160,149

Table 5 shows a net benefit from a PPA procurement of \$4 million. This compares to the direct purchase option net benefit of \$6.2 million shown in Table 4. The NPV net benefit difference between the two options is just over \$2.1 million.

BID EVALUATION

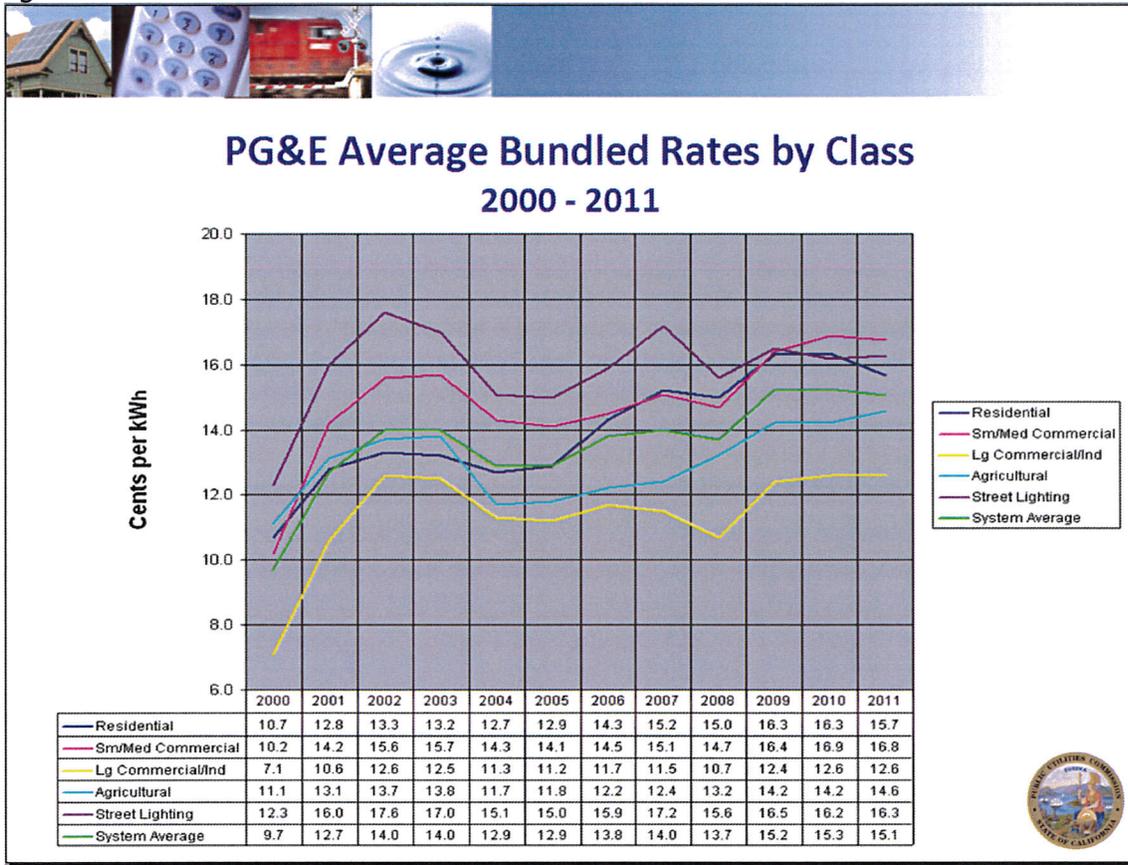
PPA Option

Evaluation of a PPA is primarily a comparison between the rates proposed by SunEdison to those of PG&E. While a PPA sets rates annually for 20 years, we don't know how PG&E's rates will change over the same period. Through examination of California Public Utility Commission (CPUC) filings and recent analyses by rate experts, we can get a picture of the short term outlook for rates. For ten years after the electricity crisis from 2002 to 2011, PG&E rates were relatively flat (see Figure 1). This was caused by a number of factors including pressure to keep rates stable after huge increases during the electricity crisis (years 2000– 2002), a precipitous decrease in natural gas prices from record setting levels (natural gas is the primary fuel for California fossil fuel power plants), and the economic downturn from the Great Recession.

The utility rate environment in California has dramatically changed in the past few years. Upward pressure on rates is significant. The economy is growing again, natural gas prices have rebounded (up 40% since the summer of 2013), significant need for capital investment in transmission and distribution infrastructure, and the costs of bringing on enough renewable power to meet the utilities' Renewable Portfolio Standard (RPS) goal of 33% by 2020. The County has included an 8% increase to the FY14/15 electricity budget based on new PG&E rates for January 1, 2014. Based on the best available data we expect another 8% rate increase for FY 15/16. Overall the expectation is that PG&E rates will increase approximate 4% over the next ten years.



Figure 1: PG&E Historical Rates 2000 - 2011

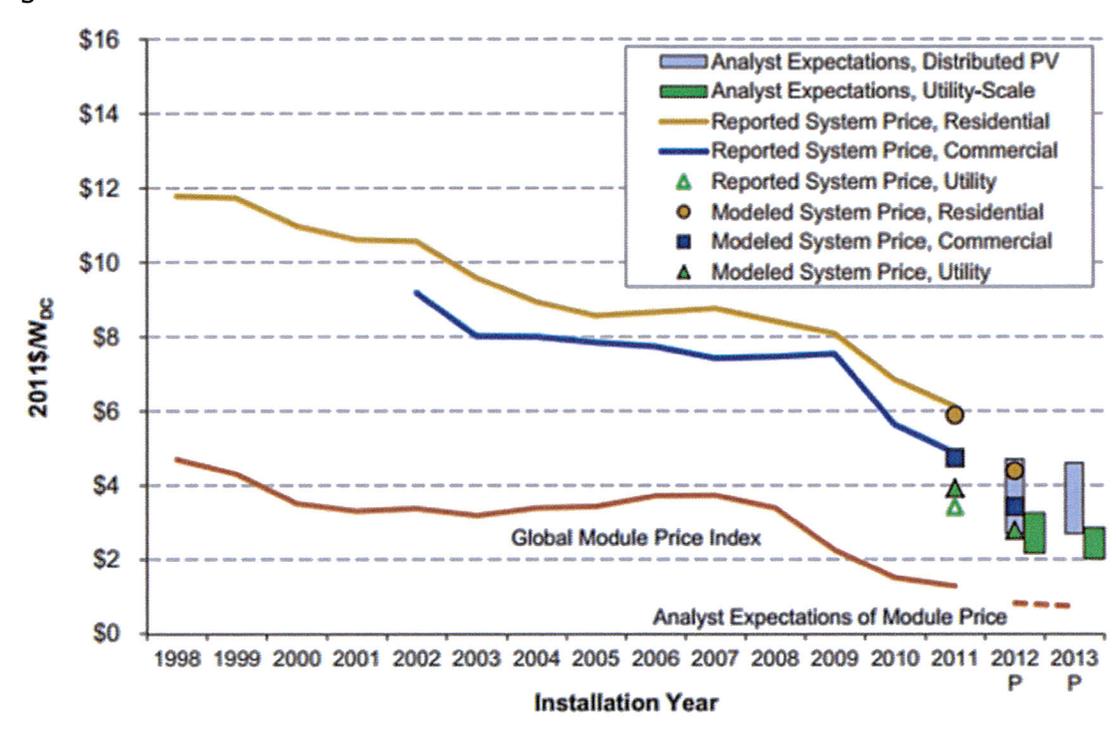


With this expectation, we believe the 4% annual utility rate increase assumption used in the financial analyses prepared for the R-REP sites to be sound.

Direct Purchase Option

SunEdison's direct purchase bid includes a complete turnkey installation and 20 year pricing for operations and maintenance. To evaluate this bid we look at the industry standard unit cost of solar installations which is price per Watt DC capacity of the solar system. Figure 2 is from a 2012 report by the National Renewable Energy and Lawrence Berkeley National Labs (*Photovoltaic (PV) Pricing Trends: Historical, Recent, and Near-Term Projections*).

Figure 2: Solar Unit Costs



As shown, the price for solar installations has declined significantly with a steep drop beginning in 2009. The blue line represents commercial systems. In 2009, the average commercial installation unit cost was approximately \$7.75/Watt. This report projected a 2013 unit cost ranging from \$3.25 to \$4.24/Watt. The unit cost price based on SunEdison’s bid for the County’s six sites averages \$2.87/Watt. The R-REP advisory team and the Participating Agencies view the SunEdison proposal to be very competitive. The timing and nature of the RFP with expected economies of scale from all Participating Agencies has provided an advantage in competition and pricing.

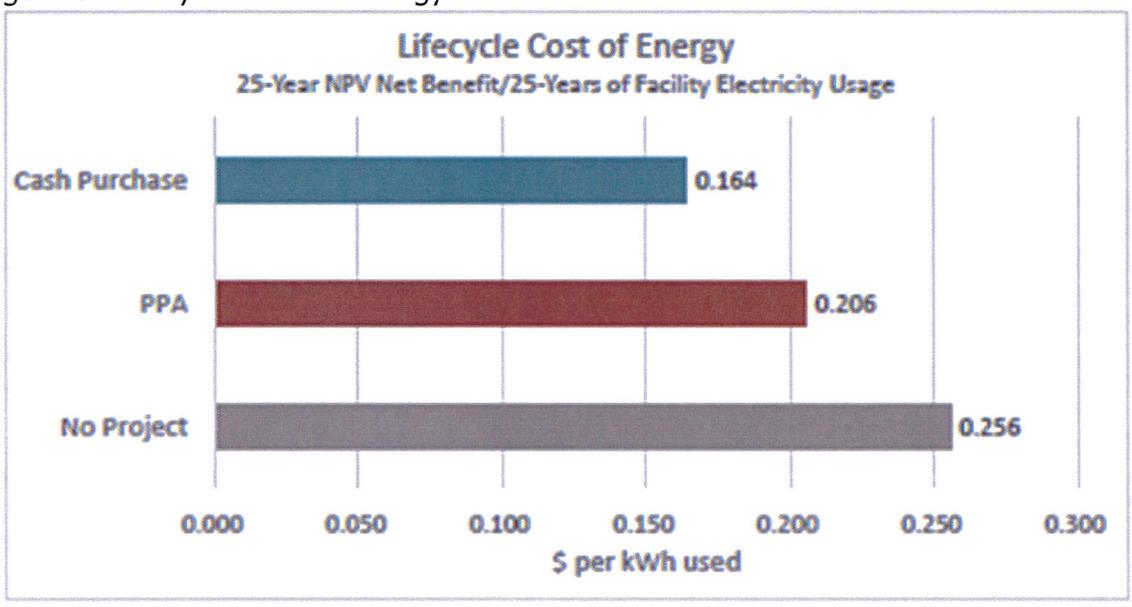
Based on discussions with market participants it is expected these steep declines in solar prices will level out as trade tariffs take effect and recent over supply tightens.

RECOMMENDATION

Staff recommends moving forward with the Direct Purchase option. Only a few years ago comparing procurement via a PPA or Direct Purchase would have almost always gone in favor

of the PPA. PPAs provided a way to share in the 30% Federal Tax Credit available to private entities while making no capital investment. But because the price of solar systems have declined so dramatically the better financial option is to direct purchase and own the system as shown by the financial summaries in Tables 4 & 5 even without the Federal Tax Credit and taking into account the cost of ownership over the system's lifecycle. A Direct Purchase is a better hedge against future rate increases as shown in Figure 3. It shows for the aggregate of all six sites, the 25 year Lifecycle Cost of Electricity (LCOE) estimated with a Direct Purchase, PPA and No Project. The LCOE is the total cost of the electricity purchased divided by the total electricity used. For the Direct Purchase option, the cost of electricity includes all construction, project management, contingencies, and operations and maintenance plus additional utility costs above those produced by the system. For the PPA, the cost of electricity includes the PPA purchase of generated solar power plus utility costs above those produced by the system. The "No Project" option is business as usual.

Figure 3: Lifecycle Cost of Energy



The advantage of a Direct Purchase is clear. The hedge keeps the County's electricity cost at these facilities at \$0.164/kWh. The PPA LCOE is 25% higher at \$0.206/kWh and the No Project LCOE is 56% higher at \$0.256/kWh.

It is understood that a Direct Purchase is dependent on securing funds. In lieu of finding a funding source, we strongly recommend going with the PPA option as it is still provides a 19% decrease in LCOE from the business as usual option.



Contra Costa County
Public Works
D e p a r t m e n t

Julia R. Bueren, Director

Deputy Directors

Brian M. Balbas

Stephen Kowalewski

Stephen Silveira

Joe Yee

ATTACHMENTS:

Attachment 1 - Alameda County GSA's memo to their Board dated April 7, 2014

Attachment 2 – R-REP Financial Summaries (Aggregate/site)

JRB; BMB

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April 7, 2014

TO: Each Member, Board of Supervisors
 FROM: Aki K. Nakao, Interim Director, General Services Agency *Aki Nakao for*
 SUBJECT: REGIONAL RENEWABLE ENERGY PROCUREMENT (R-REP) BID EVALUATION

This memo is being provided as an update on the R-REP Request for Proposal (RFP) process and will include detailed information on the recommendation for award of contracts by R-REP Participating Agencies, and the authorization to negotiate for Master Contract No. 901098 for the Alameda County sites included in the solicitation. Information on the structure of the RFP, the projected costs and benefits for R-REP sites, the selection criteria and process for the solicitation, and the upcoming negotiations process is also included.

On September 17, 2013, your Board authorized the Director of General Services Agency (GSA) to advertise and publish the Regional Renewable Energy Procurement (R-REP) RFQ/RFP, Master Contract No. 901098, on behalf of the nineteen (19) Participating Agencies in the collaborative procurement. The GSA-Administration subsequently issued a hybrid, two-step solicitation for R-REP. This included a Request for Qualification (RFQ) to identify and prequalify providers of renewable energy power systems for municipal facilities via on-site generation of solar photovoltaic (PV), solar thermal, and fuel cell systems, followed by a RFP from prequalified bidders. The solicitation was issued by GSA in its capacity as Lead Agency and on behalf of the other Participating Agencies in the Bay Area, per terms of a Memorandum of Understanding (MOU) executed on February 19, 2013. The solicitation included 186 sites that were grouped into 11 bid bundles. Each bid bundle was comprised of sites from across two or more agencies participating in the R-REP.

Your Board received a memo on January 30, 2014 regarding the R-REP bid response. Twelve vendors submitted qualified proposals for six out of the 11 bid bundles that were included in the RFP. The vendors submitted bids for bundles M1, M2, M3, M4, L1 and BA2. A subsequent evaluation of the bids was conducted, as described in detail below.

Upon conclusion of negotiations, GSA will return to your Board for contract award and approval.

RECOMMENDATION FOR AWARD/AUTHORIZATION TO NEGOTIATE:

On April 1, 2014, the following bidders were recommended for award of contracts by R-REP Participating Agencies related to specified Bid Bundles included in the R-REP solicitation:

1. Sun Edison (Sujay Parikh, Vice President), Beltsville, MD for R-REP Bid Bundles BA2, L1, M1, and M3; and

2. Solar City (Erik Folgelberg, Vice President, Commercial Sales), San Mateo, CA, for R-REP Bid Bundles M2 and M4.

In addition, negotiations for Master Contract No. 901098 were authorized for renewable energy power systems to be designed and installed and, possibly, operated on Alameda County sites, with:

1. Sun Edison (Sujoy Parikh, Vice President), Beltsville, MD, for Bid Bundles BA2 and L1; and
2. Solar City (Erik Folgelberg, Vice President, Commercial Sales), San Mateo, CA, for Bid Bundle M2.

RFP STRUCTURE:

The R-REP RFQ/RFP was structured as an indefinite quantity, multiple award, best value solicitation. In addition, this solicitation was conducted in accordance with Government Code Section 4217.10, et. seq., and specifically, Section 4217.16, which authorizes public agencies to solicit proposals from qualified persons and to award a contract on the basis of the experience of the Firm, the type of technology employed by the Firm, the cost to the local agency, and any other relevant considerations, provided that the projects deliver net cost savings to the public agency. Participating Agencies will be provided summary sheets of the financial analysis for each of their sites, such that they may make the findings consistent with Code Section 4217.10. The site financial summaries demonstrating the savings are attached to this memo (Attachments 1A and 1B).

The RFQ/RFP included innovative elements designed to meet the needs of the County and Participating Agencies in this unique, regional collaboration. These elements included financing options, standardized agreement terms, extensive technical specifications, site-specific data, workforce and unique contracting requirements and project management expense recovery terms. Each is briefly described below:

- Financing Options - To provide flexibility to each agency, various financing options were sought including direct purchase, power purchase agreement (PPA), lease financing or other alternatives.
- Standardized Agreement Terms - General PPA and Standard Agreement terms were agreed upon by the Participating Agencies counsel prior to the solicitation and described in the R-REP RFP.
- Technical Specification Requirements - Technical requirements for each site and PV, solar thermal or fuel cell technologies were defined.

- Detailed Site Data - Detailed information on existing Pacific Gas & Electric (PG&E) rates, as-built drawings, hazardous materials reports, and other site specific information was gathered and provided to vendors as part of the RFP materials.
- Workforce Plans - Bidders were required to submit workforce plans containing good-faith effort commitments to achieve 40% local hiring on all projects undertaken.
- Unique Contracting Requirements - The RFP contained a requirement that the recommended bidders meet all unique contracting requirements, including workforce/local hire requirements, as appropriate for the County and each Participating Agency.
- Project Management Expense Recovery - The bidders were instructed to include in their PPA pricing 3.5% of the proposed direct purchase price for cost recovery of Participating Agency project management expenses associated with delivery of the project sites. This project management recovery option was not included in direct acquisition pricing, as there are no opportunities to amortize the expense.

PROJECTED COSTS AND BENEFITS:

Based on feasibility studies that were completed prior to issuing the RFP, total design and construction costs across all agencies are an estimated \$131 million if all projects included in the solicitation were paid for through a cash acquisition. The feasibility studies were conducted by one or more of the following firms: kW Engineering; Information & Energy Services, Inc.; Optony, Inc.; Kenwood Energy; and/or Energy Solutions. These feasibility studies were validated by the RFP consulting team of Newcomb Anderson McCormick, Optony, Inc., and KNN.

Total design and construction costs across all agencies for those sites that received bids (sites in Bundles BA2, L1, M1, M2, M3 and M4) are estimated at \$58.3 million. The total net benefit under cash acquisition for all sites that received bids is approximately \$108.8 million. For only the County's sites, in the case that all sites are developed and the renewable energy systems are purchased and operated by the County, the total net benefit over 25 years is an estimated \$53.1 million. It is unlikely, however that the County or the Participating Agencies will directly acquire the renewable energy systems and instead will likely finance either through third-party financing such as Power Purchase Agreements (PPA) or equipment leases, or they will finance using State and federal incentives such as Clean Renewable Energy Bonds. If sites are developed under a PPA, the total 25 year net benefit for all sites that received bids (sites in Bundles BA2, L1, M1, M2, M3 and M4) is estimated at \$51.8 million, and if all of the County's sites are developed using PPAs, there would be approximately \$27.9 million in net savings over 25 years.

One of the main objectives of the R-REP solicitation was to achieve economies of scale through the collaborative procurement strategy. Bidders were required to hold pricing with assumptions that there could be up to 10% movement of sites outside of bundles, anticipating the possibility that some Participating Agencies may decide not to enter into contracts.

On behalf of the 18 Participating Agencies, GSA has worked diligently to stay on schedule during the procurement process. Due to budgetary and time constraints it is extremely important that GSA continues to stay on track during negotiations. GSA and seven other Participating Agencies currently hold reservations for California Solar Initiative (CSI) rebates with the program administrator, PG&E, for a total of over \$5 million. These reservations will expire on July 21, 2014 without a signed contract. See attached list of Participating Agencies that hold CSI reservations (Attachment 2). GSA will make every effort to meet the CSI deadline.

SELECTION CRITERIA/PROCESS:

On June 10, 2013, the County issued a Request for Information (RFI), which was distributed via email not only through the County's EGOV bulletin to a total of 3,763 recipients, but also to the members of SolarTech and CalSEIA, two local non-profit solar trade organizations comprised of small and large firms. In addition, the Alameda County Purchasing Department notified 43 solar vendors of the RFI directly. Alameda County conducted outreach at three events targeting small, local businesses in advance of issuing the RFP.

The RFP was released on September 18, 2013 and was posted in three different categories as both an RFP and a RFQ: Architectural and Engineering (A&E), Construction, and Professional Services. An EGOV bulletin was sent to Subscribers of GSA A&E - Current Contracting Opportunities, GSA Construction - Current Contracting Opportunities, and GSA Professional Services - Current Contracting Opportunities.

On the morning of October 4, 2013 the County hosted a bidders conference to provide an opportunity for interested vendors to attend live or via web-conference, and to allow them to ask questions regarding the RFP. On the afternoon of the same day a networking conference was held. On December 6, 2013, a mandatory workforce development conference was held to allow qualified vendors and local job development agencies to network. This event was attended by job development agencies, prime vendors and subcontractors.

On October 22, 2013, 20 vendors submitted RFQ responses, 17 of which were deemed qualified. The nature of the disqualifications ranged from not demonstrating adequate prior experience, to simply not filling out the entire the questionnaire, which made it impossible to judge their ability to meet the qualifications. This list of qualified vendors may be used by Participating Agencies for further renewable energy solicitations as part of the indefinite quantity, multiple award solicitation structure. The qualified vendors were instructed to submit proposals. On January 14, 2014, 14 responses were received for six out of the 11 bid bundles that were included in the RFP. Bid responses were not received for the (2) small solar PV bundles, the (1) Solar Thermal,

(1) Fuel Cell, and (1) Alternative bundle (BA1). Upon conclusion of contract negotiations County staff will conduct a survey of all bidders to obtain further information on the entire RFP process. Upon receipt of the bid proposals a completeness check was conducted and it was determined that responses submitted by three vendors, Gestamp Asetym Solar North America, Inc.; AMSolar, LLC; and Cool Earth Solar, Inc. were incomplete, and therefore these bids were disqualified.

Bids were evaluated by the County Selection Committee (CSC) comprised of representatives from County of Alameda Community Development Agency, UC Berkeley, Hayward Area Recreation and Park District, County of Alameda Technical Services Department, City of Oakland and County of Santa Clara. Proposals were evaluated on the basis of firm experience, technical proposal, cost, financing plan, etc., as described in the RFP attachment Exhibit G, Proposal Evaluation Matrix. To assist the Selection Committee, the County's consultants, Newcomb Anderson McCormick, Optony, Inc., and KNN reviewed the bid proposals and prepared an analysis of financial and technical criteria.

A shortlist of six vendors was selected to move on to the vendor interviews. Vendors were selected for interviews based upon the following criteria: a maximum of five bidders per bundle; only those bidders who scored above 300 points; and no bidders that scored a zero or one for the cost criteria.

SunEdison Government Solutions, LLC and Solar City Corporation were the highest ranked bidders for the bundles specified below, and are being recommended for award. County Small Local Emerging Business provisions were waived during the conduct of this multi-jurisdictional solicitation. Applicable unique contract requirements will be imposed by each awarding authority, as appropriate. Contracts entered into by the County of Alameda will meet all program requirements before a recommendation is taken to the Board of Supervisors.

A maximum total of 500 evaluation points were available for this RFP. The following are evaluation summaries by bundle:

EVALUATION SUMMARY

Highest Ranked Bidders by Bundle

Bundle	Vendor	Ranking	Points
BA2	SunEdison Government Solutions, LLC	1	441.17
L1	SunEdison Government Solutions, LLC	1	444.30
M1	SunEdison Government Solutions, LLC	1	446.67
M2	SolarCity Corporation	1	377.50
M3	SunEdison Government Solutions, LLC	1	444.67
M4	SolarCity Corporation	1	367.67

<i>Detailed Scores by Bundle and Bidder</i>			
Bundle	Vendor	Ranking	Points
BA2	SunEdison Government Solutions, LLC	1	441.17
BA2	SunEdison Government Solutions, LLC Prepay PPA	2	420.83
BA2	Borrego Solar Alternate	3	420.40
BA2	Borrego Solar	4	419.63
BA2	Sun Power Corporation, Systems	5	411.67
BA2	Ecoplexus, Inc.	6	403.97
BA2	Cupertino Electric, Inc.	7	363.17
BA2	Cupertino Electric, Inc. Plan B	8	356.77

Bundle	Vendor	Ranking	Points
L1	SunEdison Government Solutions, LLC	1	444.30
L1	Borrego Solar Systems, Inc. 1000V UCB	2	411.83
L1	Borrego Solar Systems, Inc. 600V	3	410.23
L1	Borrego Solar Systems, Inc.	4	408.57
L1	Ecoplexus, Inc.	5	398.00
L1	Sun Power Corporation, Systems	6	383.17
L1	SolarCity Corporation	7	343.30

Bundle	Vendor	Ranking	Points
M1	SunEdison Government Solutions, LLC	1	446.67
M1	Ecoplexus, Inc.	2	390.70

Bundle	Vendor	Ranking	Points
M2	SolarCity Corporation	1	377.5

Bundle	Vendor	Ranking	Points
M3	SunEdison Government Solutions, LLC	1	444.67
M3	Ecoplexus, Inc.	2	396.70

Bundle	Vendor	Ranking	Points
M4	SolarCity Corporation	1	367.67
M4	Cupertino Electric, Inc.	2	363.47

Each Member, Board of Supervisors
R-REP Bid Procedure
April 7, 2014
Page 7

NEGOTIATIONS PROCESS:

The R-REP Project Team in collaboration with GSA Purchasing and Technical Services Departments, and representatives from the Participating Agencies, will conduct negotiations with the recommended bidders. The County will lead negotiations for those bundles in which it has sites, and Participating Agencies may elect to participate collectively or negotiate on their own. Bid information, including pricing, will be distributed to participating agencies for their use in collaborative or independent contract negotiations. The R-REP project team strongly recommends collaborative contract negotiations as a best practice to leverage the negotiating power of the Participating Agencies. Staff plans to share contract terms as negotiations progress with all of the Participating Agencies. Ultimately the discretion to proceed with the development of any specific project at each of the sites will be retained by the governing authority of each Participating Agency per the terms of the MOU.

For additional information on the R-REP please contact:

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Caroline.Judy@acgov.org

Kayla Platt
Management Associate II, General Services Agency
OR 510-208-9603
Kayla.Platt@acgov.org

\\ADMIN\R-REP BID PROCEDURES

Attachments

cc: Susan S. Muranishi, County Administrator
Patrick J. O'Connell, Auditor-Controller
Donna R. Ziegler, County Counsel
Chiefs of Staff, Board of Supervisors

County of Contra Costa, SunEdison Solar Project Summary

Site Information

Meter Number	Various
Annual Site Load (kWh/year)	5,059,306
Rate Prior to Solar	Various
Recommended Rate with Solar	Various

System Information

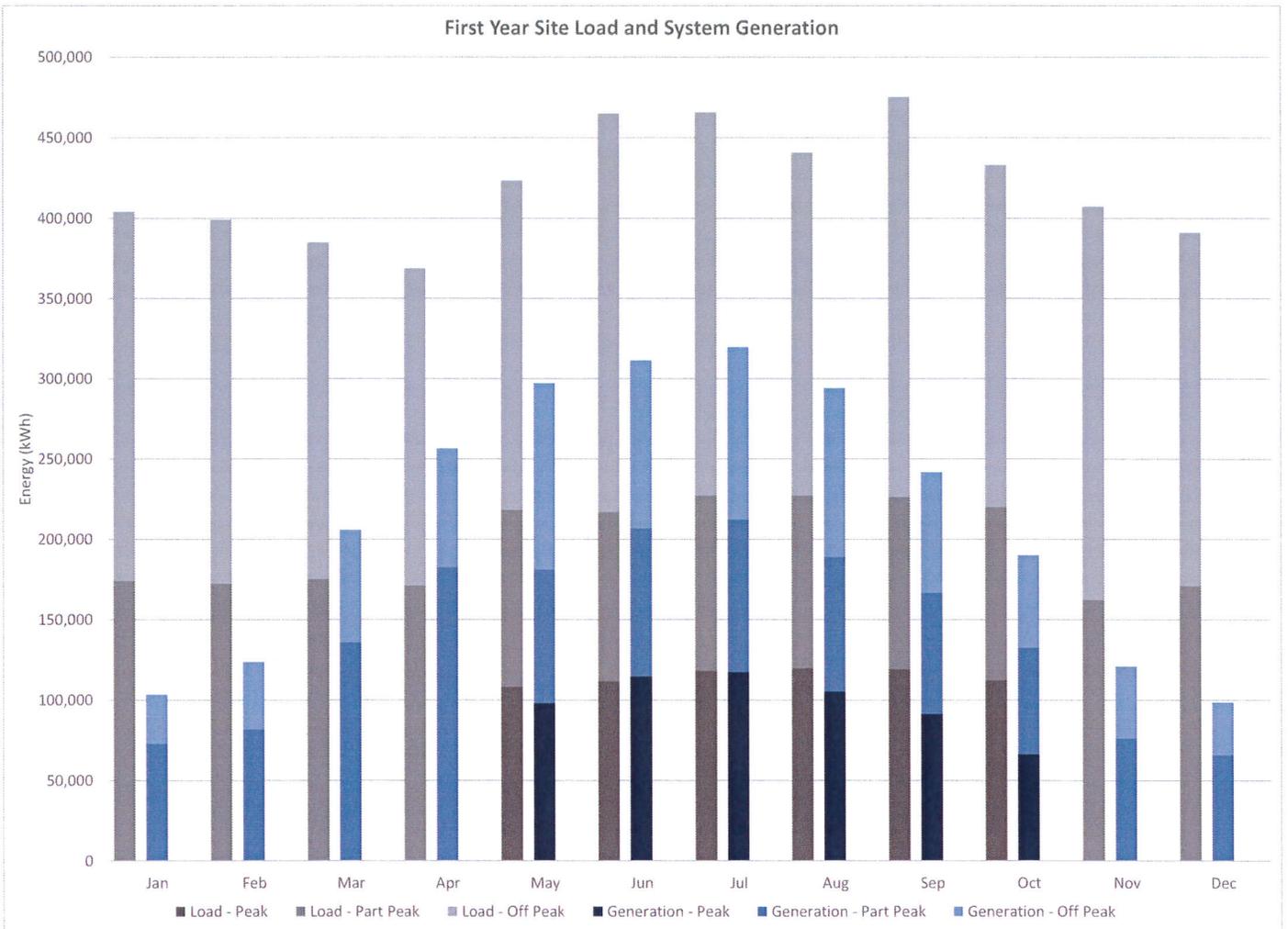
System Size (kW)	1,742.0
First Year Solar Production (kWh)	2,563,750
Annual System Yield (kWh/kW)	1,472
PV Degradation Rate (%/year)	0.50%

Model Assumptions

Utility Escalation Rate (%/year)	4.00%
Bill Demand Reduction (%)	Various
NPV Discount Rate (%/year)	3.00%
Analysis Lifecycle (years)	25
Incentive Rate (\$/kWh-generated)	0.09
Ownership PM, Contingency (% of Capital Costs)	5.00%
PPA PM, Contingency (Included in PPA Price)	3.50%
PM Reimbursement to Agency (PPA Only)	\$174,382

System Metrics

Year One Load Offset	51%
25 Year Bill Offset	51%
PPA	
Initial PPA Price with bundle discount (\$/kWh)	Various
PPA Escalation Rate (%/year)	Various
Ownership	
Construction Cost per Watt with bundle discount	\$2.86
Installed Cost per Watt (includes PM, O&M Costs)	\$3.33
Simple Payback Year	9



Utility Expenditures

	NPV	SUM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	...	Year 25
Bill No Solar	(\$21,221,448)	(\$32,347,267)	(\$776,721)	(\$807,790)	(\$840,102)	(\$873,706)	(\$908,654)	(\$945,000)	...	(\$1,990,973)
Bill with Solar	(\$10,298,045)	(\$15,850,689)	(\$348,576)	(\$364,278)	(\$380,670)	(\$397,781)	(\$416,387)	(\$435,881)	...	(\$1,039,540)
Bill Savings	\$10,923,402	\$16,496,579	\$428,146	\$443,512	\$459,431	\$475,925	\$492,267	\$509,119	...	\$951,433

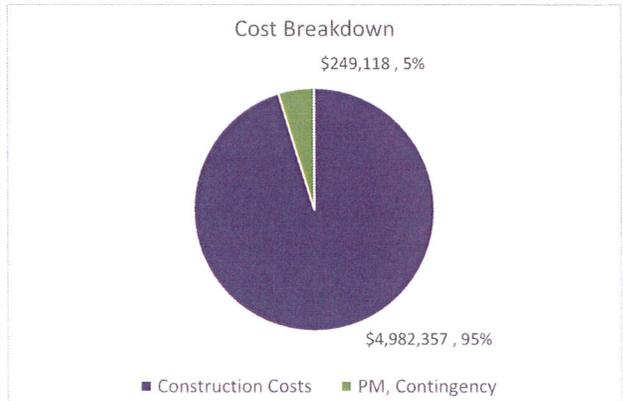
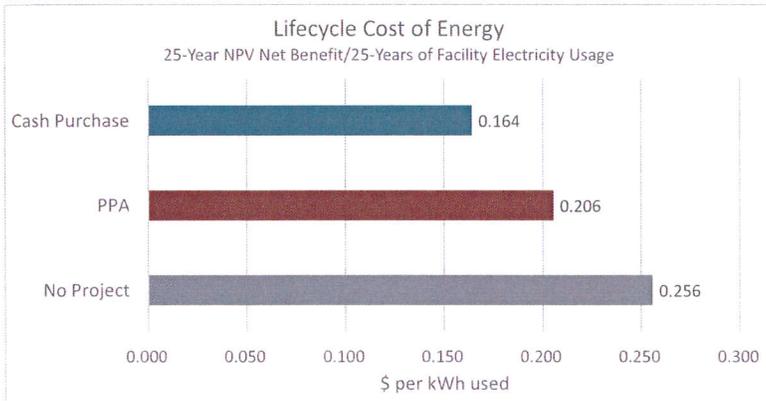
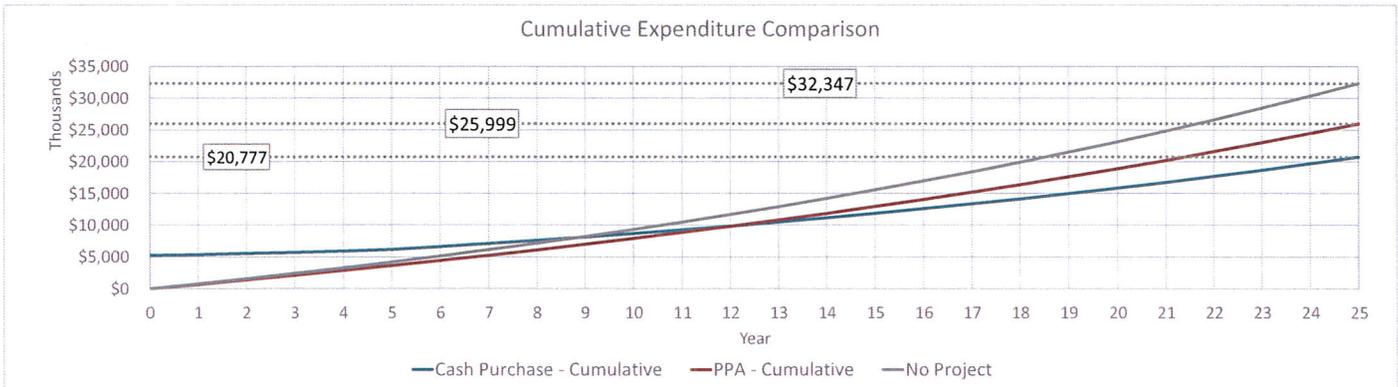
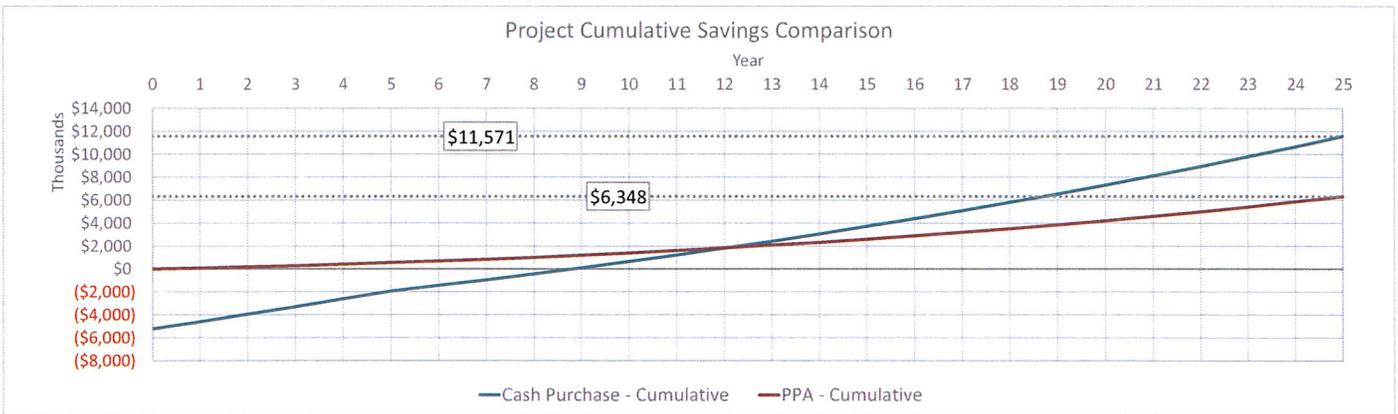
County of Contra Costa, SunEdison Solar Project Summary

Ownership Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$10,923,402	\$16,496,579	\$0	\$428,146	\$443,512	\$459,431	\$475,925	\$492,267	...	\$951,433
Utility Rebate	\$1,046,506	\$1,142,208	\$0	\$230,738	\$229,584	\$228,436	\$227,294	\$226,157	...	\$0
Total Revenue	\$11,969,908	\$17,638,787	\$0	\$658,883	\$673,096	\$687,867	\$703,218	\$718,424	...	\$951,433
Costs										
Construction	(\$4,982,357)	(\$4,982,357)	(\$4,982,357)	\$0	\$0	\$0	\$0	\$0	...	\$0
PM, Contingency	(\$249,118)	(\$249,118)	(\$249,118)	\$0	\$0	\$0	\$0	\$0	...	\$0
O&M	(\$565,298)	(\$836,577)	\$0	(\$26,118)	(\$26,641)	(\$27,173)	(\$27,717)	(\$28,271)	...	(\$42,010)
Total Costs	(\$5,796,772)	(\$6,068,051)	(\$5,231,475)	(\$26,118)	(\$26,641)	(\$27,173)	(\$27,717)	(\$28,271)	...	(\$42,010)
Net Benefit	\$6,173,136	\$11,570,735	(\$5,231,475)	\$632,765	\$646,455	\$660,694	\$675,501	\$690,153	...	\$909,423

Power Purchase Agreement Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$10,923,402	\$16,496,579	\$0	\$428,146	\$443,512	\$459,431	\$475,925	\$492,267	...	\$951,433
PPA Costs	(\$6,910,416)	(\$10,148,345)	\$0	(\$337,994)	(\$343,030)	(\$348,141)	(\$353,329)	(\$358,593)	...	(\$482,022)
Net Benefit	\$4,012,987	\$6,348,234	\$0	\$90,152	\$100,482	\$111,290	\$122,596	\$133,674	...	\$469,410



SunEdison Sheriff-Coroner - Forensic Science Center (M3) Solar Project Summary

Site Information

Meter Number	9368R7
Annual Site Load (kWh/year)	625,334
Rate Prior to Solar	A10SX
Recommended Rate with Solar	A6X

System Information

System Size (kW)	383.0
First Year Solar Production (kWh)	567,214
Annual System Yield (kWh/kW)	1,481
PV Degradation Rate (%/year)	0.50%

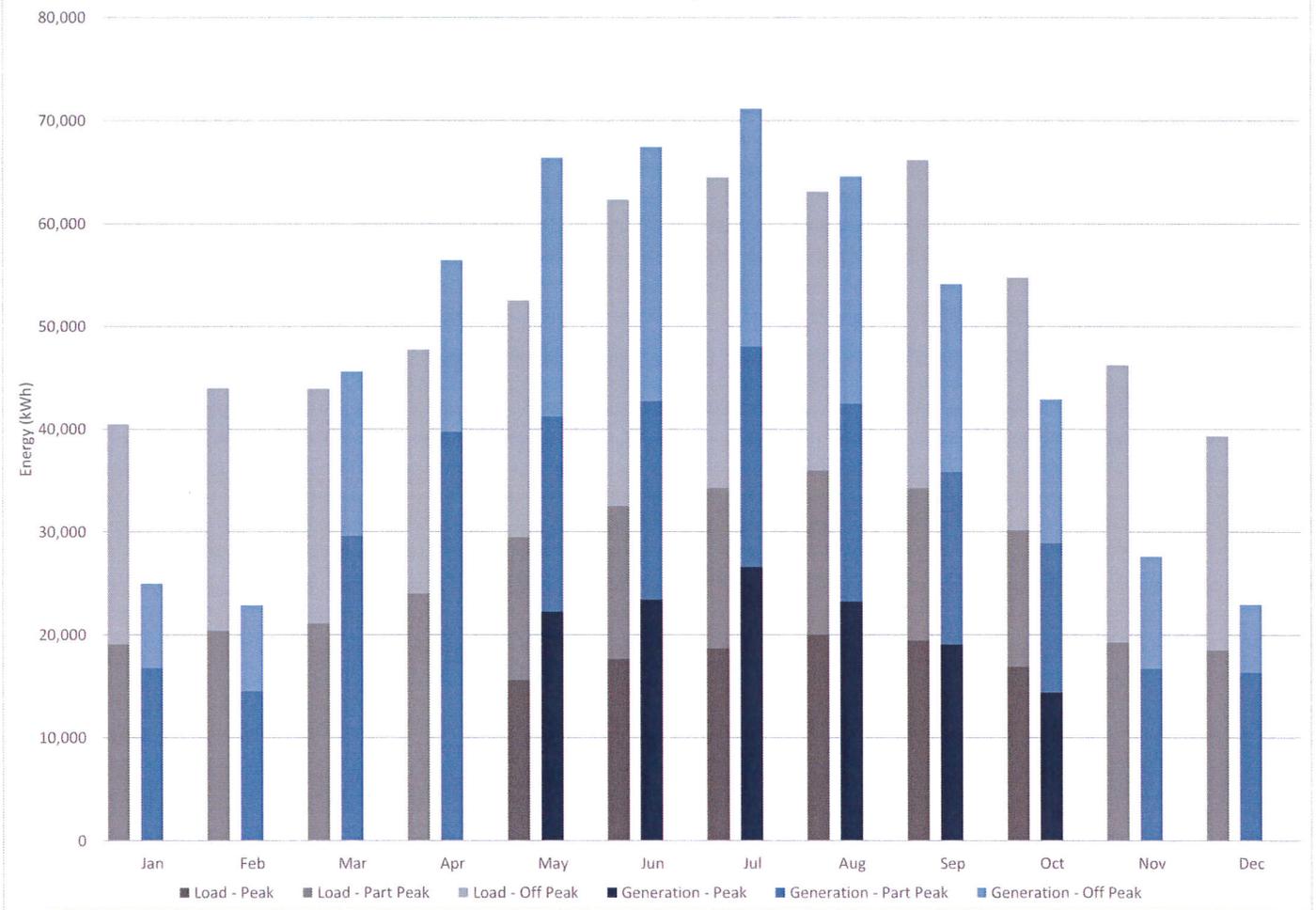
Model Assumptions

Utility Escalation Rate (%/year)	4.00%
Bill Demand Reduction (%)	10.00%
NPV Discount Rate (%/year)	3.00%
Analysis Lifecycle (years)	25
Incentive Rate (\$/kWh-generated)	0.09
Ownership PM, Contingency (% of Capital Costs)	5.00%
PPA PM, Contingency (Included in PPA Price)	3.50%
PM Reimbursement to Agency (PPA Only)	\$36,697

System Metrics

Year One Load Offset	91%
25 Year Bill Offset	94%
PPA	
Initial PPA Price with bundle discount (\$/kWh)	\$0.1300
PPA Escalation Rate (%/year)	2.0%
Ownership	
Construction Cost per Watt with bundle discount	\$2.74
Installed Cost per Watt (includes PM, O&M Costs)	\$3.20
Simple Payback Year	8

First Year Site Load and System Generation



Utility Expenditures

	NPV	SUM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	...	Year 25
Bill No Solar	(\$2,928,299)	(\$4,463,525)	(\$107,178)	(\$111,465)	(\$115,924)	(\$120,561)	(\$125,383)	(\$130,398)	...	(\$274,730)
Bill with Solar	(\$181,713)	(\$315,682)	(\$313)	(\$326)	(\$339)	(\$352)	(\$1,111)	(\$1,977)	...	(\$35,445)
Bill Savings	\$2,746,586	\$4,147,843	\$106,865	\$111,139	\$115,585	\$120,208	\$124,272	\$128,421	...	\$239,285

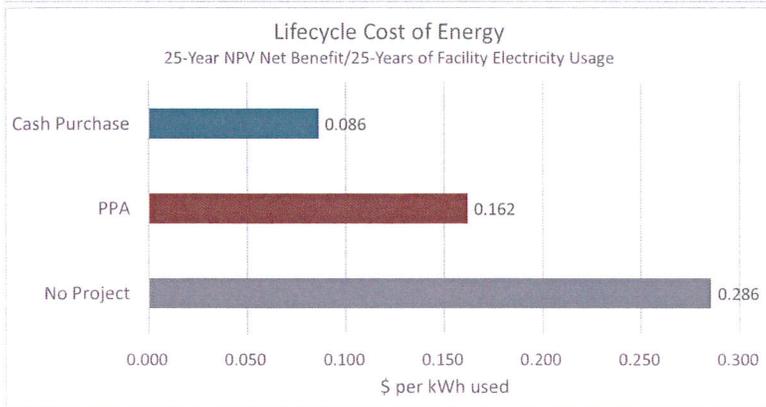
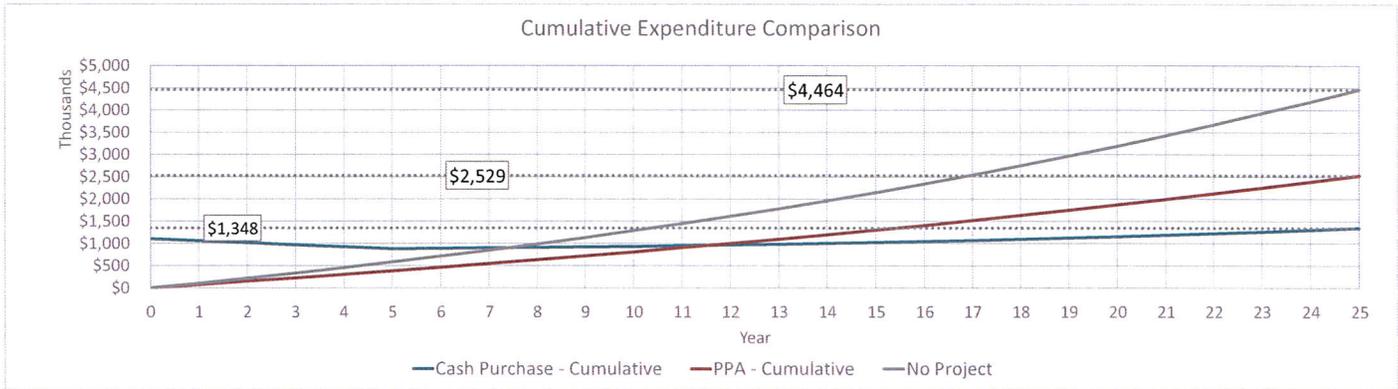
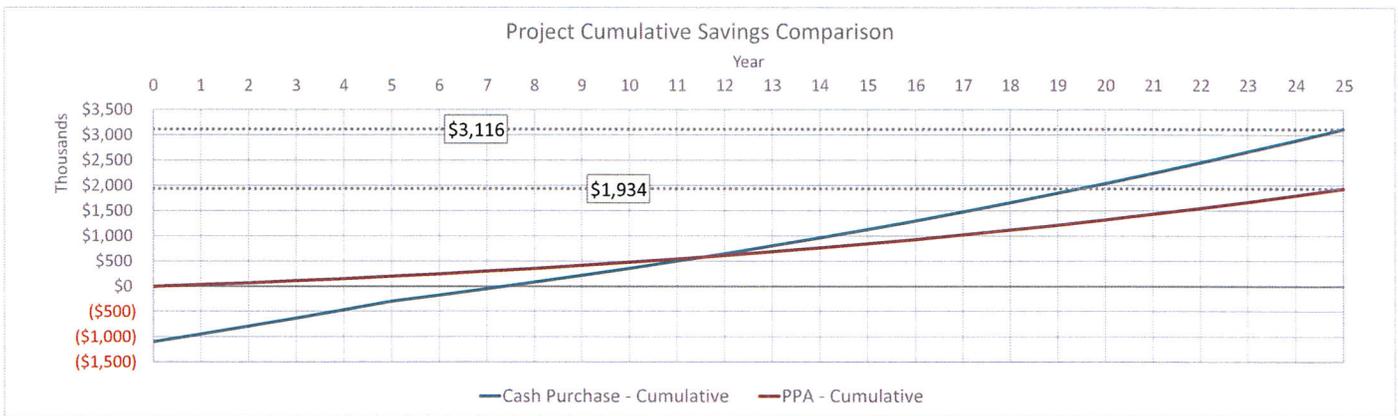
SunEdison Sheriff-Coroner - Forensic Science Center (M3) Solar Project Summary

Ownership Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$2,746,586	\$4,147,843	\$0	\$106,865	\$111,139	\$115,585	\$120,208	\$124,272	...	\$239,285
Utility Rebate	\$231,533	\$252,707	\$0	\$51,049	\$50,794	\$50,540	\$50,287	\$50,036	...	\$0
Total Revenue	\$2,978,119	\$4,400,549	\$0	\$157,914	\$161,933	\$166,125	\$170,496	\$174,308	...	\$239,285
Costs										
Construction	(\$1,048,484)	(\$1,048,484)	(\$1,048,484)	\$0	\$0	\$0	\$0	\$0	...	\$0
PM, Contingency	(\$52,424)	(\$52,424)	(\$52,424)	\$0	\$0	\$0	\$0	\$0	...	\$0
O&M	(\$124,327)	(\$183,990)	\$0	(\$5,744)	(\$5,859)	(\$5,976)	(\$6,096)	(\$6,218)	...	(\$9,239)
Total Costs	(\$1,225,235)	(\$1,284,898)	(\$1,100,908)	(\$5,744)	(\$5,859)	(\$5,976)	(\$6,096)	(\$6,218)	...	(\$9,239)
Net Benefit	\$1,752,884	\$3,115,652	(\$1,100,908)	\$152,170	\$156,074	\$160,149	\$164,400	\$168,090	...	\$230,046

Power Purchase Agreement Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$2,746,586	\$4,147,843	\$0	\$106,865	\$111,139	\$115,585	\$120,208	\$124,272	...	\$239,285
PPA Costs	(\$1,507,366)	(\$2,213,654)	\$0	(\$73,726)	(\$74,825)	(\$75,940)	(\$77,071)	(\$78,220)	...	(\$105,143)
Net Benefit	\$1,239,220	\$1,934,189	\$0	\$33,138	\$36,314	\$39,645	\$43,137	\$46,052	...	\$134,142



SunEdison Dept. of Public Works (M3) Solar Project Summary

Site Information

Meter Number	6042623657 (SVC ID)
Annual Site Load (kWh/year)	153,334
Rate Prior to Solar	A1P
Recommended Rate with Solar	A6X

System Information

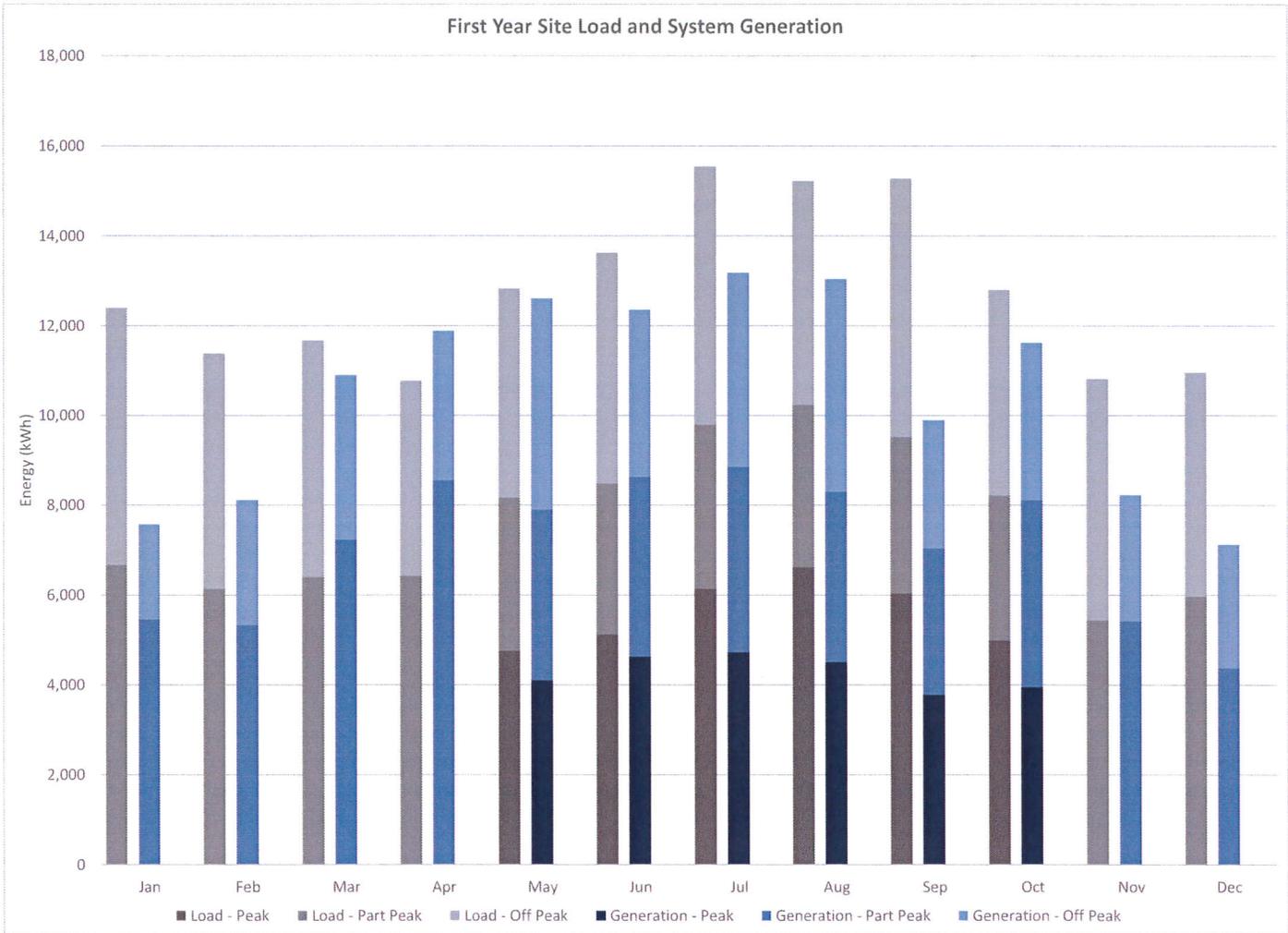
System Size (kW)	81.0
First Year Solar Production (kWh)	126,547
Annual System Yield (kWh/kW)	1,562
PV Degradation Rate (%/year)	0.50%

Model Assumptions

Utility Escalation Rate (%/year)	4.00%
Bill Demand Reduction (%)	0.00%
NPV Discount Rate (%/year)	3.00%
Analysis Lifecycle (years)	25
Incentive Rate (\$/kWh-generated)	0.09
Ownership PM, Contingency (% of Capital Costs)	5.00%
PPA PM, Contingency (Included in PPA Price)	3.50%
PM Reimbursement to Agency (PPA Only)	\$8,475

System Metrics

Year One Load Offset	83%
25 Year Bill Offset	72%
PPA	
Initial PPA Price with bundle discount (\$/kWh)	\$0.1484
PPA Escalation Rate (%/year)	2.0%
Ownership	
Construction Cost per Watt with bundle discount	\$2.99
Installed Cost per Watt (includes PM, O&M Costs)	\$3.47
Simple Payback Year	9



Utility Expenditures

	NPV	SUM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	...	Year 25
Bill No Solar	(\$796,311)	(\$1,213,795)	(\$29,146)	(\$30,311)	(\$31,524)	(\$32,785)	(\$34,096)	(\$35,460)	...	(\$74,709)
Bill with Solar	(\$226,645)	(\$354,207)	(\$6,516)	(\$6,930)	(\$7,367)	(\$7,826)	(\$8,310)	(\$8,819)	...	(\$25,300)
Bill Savings	\$569,667	\$859,588	\$22,630	\$23,381	\$24,157	\$24,959	\$25,786	\$26,641	...	\$49,409

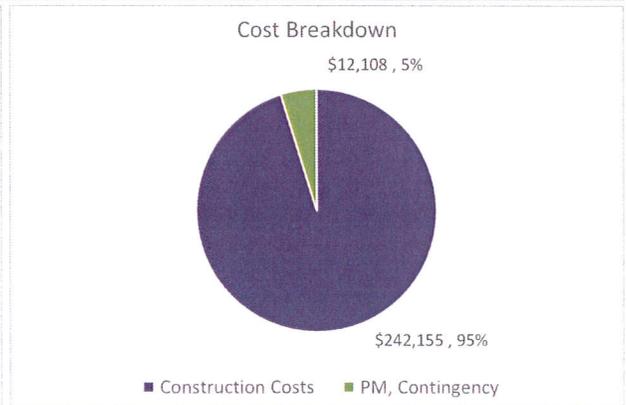
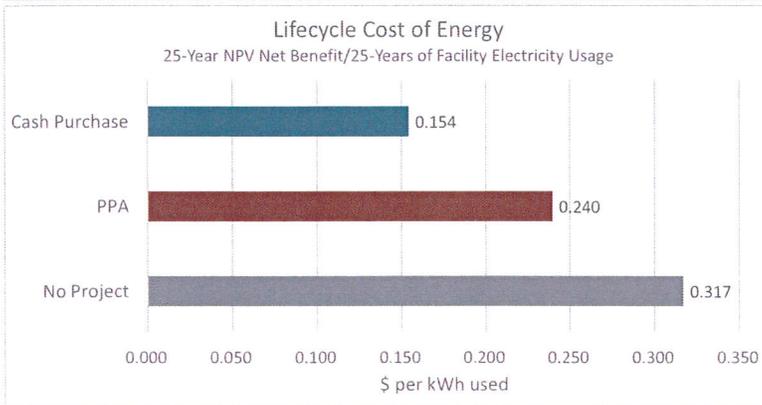
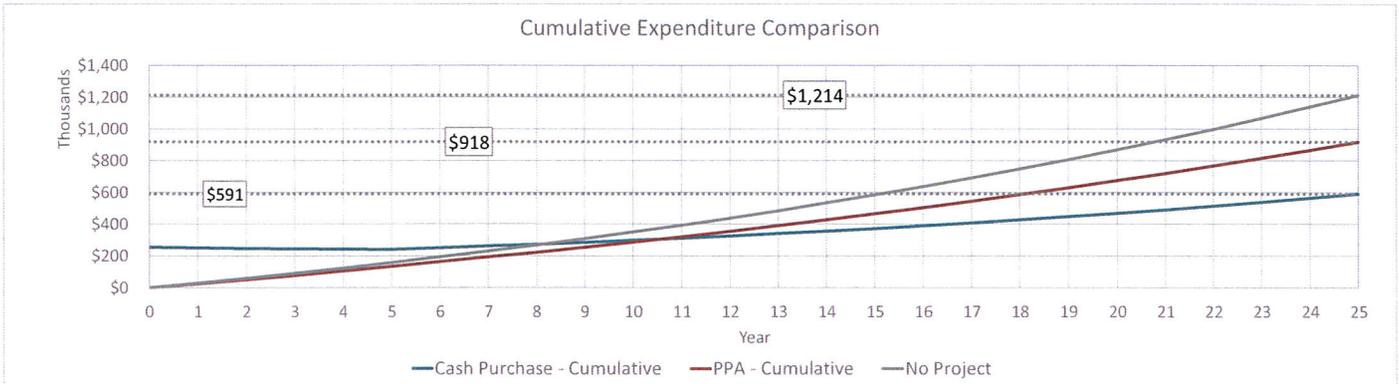
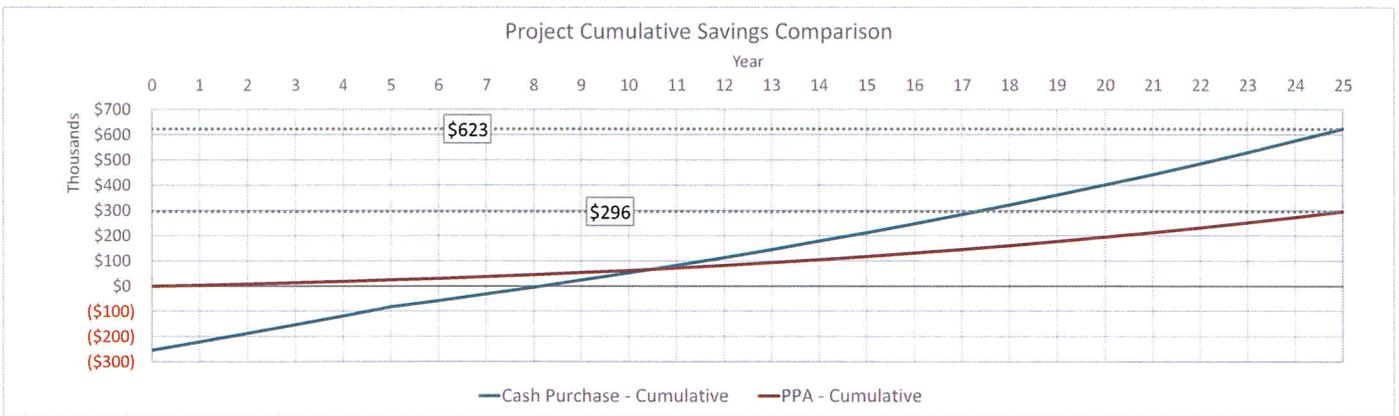
SunEdison Dept. of Public Works (M3) Solar Project Summary

Ownership Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$569,667	\$859,588	\$0	\$22,630	\$23,381	\$24,157	\$24,959	\$25,786	...	\$49,409
Utility Rebate	\$51,656	\$56,380	\$0	\$11,389	\$11,332	\$11,276	\$11,219	\$11,163	...	\$0
Total Revenue	\$621,322	\$915,968	\$0	\$34,019	\$34,713	\$35,433	\$36,178	\$36,949	...	\$49,409
Costs										
Construction	(\$242,155)	(\$242,155)	(\$242,155)	\$0	\$0	\$0	\$0	\$0	...	\$0
PM, Contingency	(\$12,108)	(\$12,108)	(\$12,108)	\$0	\$0	\$0	\$0	\$0	...	\$0
O&M	(\$26,427)	(\$39,109)	\$0	(\$1,221)	(\$1,245)	(\$1,270)	(\$1,296)	(\$1,322)	...	(\$1,964)
Total Costs	(\$280,689)	(\$293,371)	(\$254,262)	(\$1,221)	(\$1,245)	(\$1,270)	(\$1,296)	(\$1,322)	...	(\$1,964)
Net Benefit	\$340,633	\$622,596	(\$254,262)	\$32,798	\$33,468	\$34,162	\$34,882	\$35,628	...	\$47,445

Power Purchase Agreement Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$569,667	\$859,588	\$0	\$22,630	\$23,381	\$24,157	\$24,959	\$25,786	...	\$49,409
PPA Costs	(\$383,981)	(\$563,899)	\$0	(\$18,781)	(\$19,061)	(\$19,345)	(\$19,633)	(\$19,925)	...	(\$26,784)
Net Benefit	\$185,685	\$295,689	\$0	\$3,849	\$4,320	\$4,812	\$5,326	\$5,861	...	\$22,625



SunEdison Sheriff-Coroner - Patrol & Investigation (M3) Solar Project Summary

Site Information

Meter Number	5146958005 (SVC ID)
Annual Site Load (kWh/year)	371,839
Rate Prior to Solar	A10SX
Recommended Rate with Solar	A6X

System Information

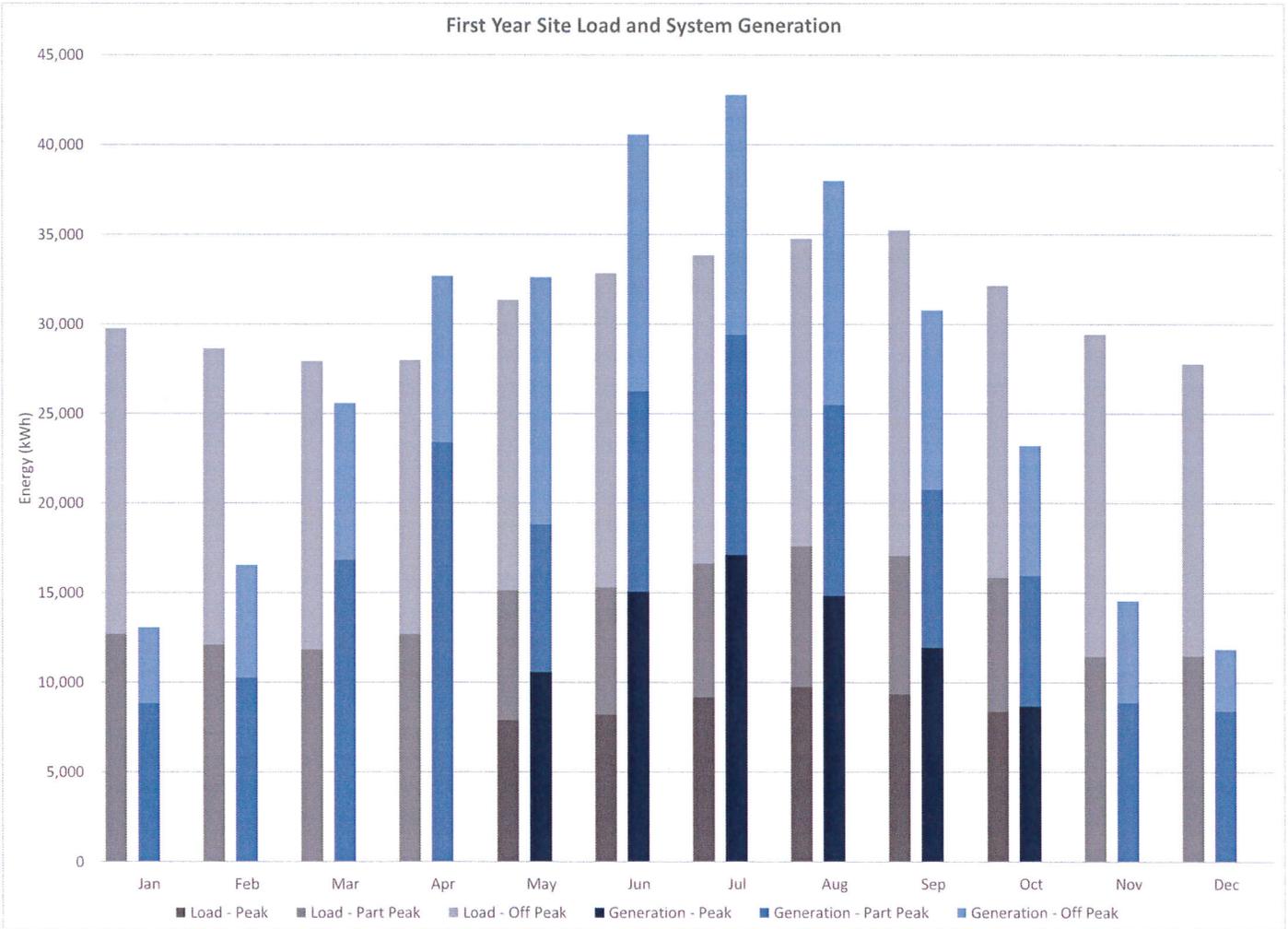
System Size (kW)	228.0
First Year Solar Production (kWh)	322,262
Annual System Yield (kWh/kW)	1,413
PV Degradation Rate (%/year)	0.50%

Model Assumptions

Utility Escalation Rate (%/year)	4.00%
Bill Demand Reduction (%)	0.00%
NPV Discount Rate (%/year)	3.00%
Analysis Lifecycle (years)	25
Incentive Rate (\$/kWh-generated)	0.09
Ownership PM, Contingency (% of Capital Costs)	5.00%
PPA PM, Contingency (Included in PPA Price)	3.50%
PM Reimbursement to Agency (PPA Only)	\$22,978

System Metrics

Year One Load Offset	87%
25 Year Bill Offset	97%
PPA	
Initial PPA Price with bundle discount (\$/kWh)	\$0.1426
PPA Escalation Rate (%/year)	2.0%
Ownership	
Construction Cost per Watt with bundle discount	\$2.88
Installed Cost per Watt (includes PM, O&M Costs)	\$3.35
Simple Payback Year	9



Utility Expenditures

	NPV	SUM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	...	Year 25
Bill No Solar	(\$1,638,915)	(\$2,498,152)	(\$59,986)	(\$62,385)	(\$64,880)	(\$67,476)	(\$70,175)	(\$72,982)	...	(\$153,761)
Bill with Solar	(\$53,810)	(\$97,057)	(\$313)	(\$326)	(\$339)	(\$352)	(\$366)	(\$381)	...	(\$13,884)
Bill Savings	\$1,585,105	\$2,401,095	\$59,672	\$62,059	\$64,542	\$67,123	\$69,808	\$72,600	...	\$139,877

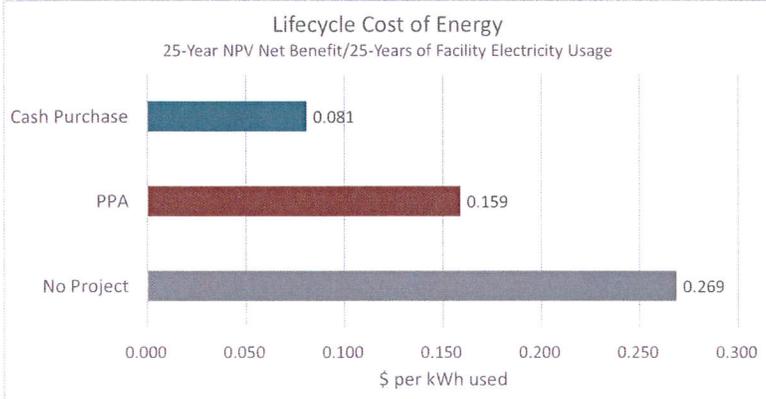
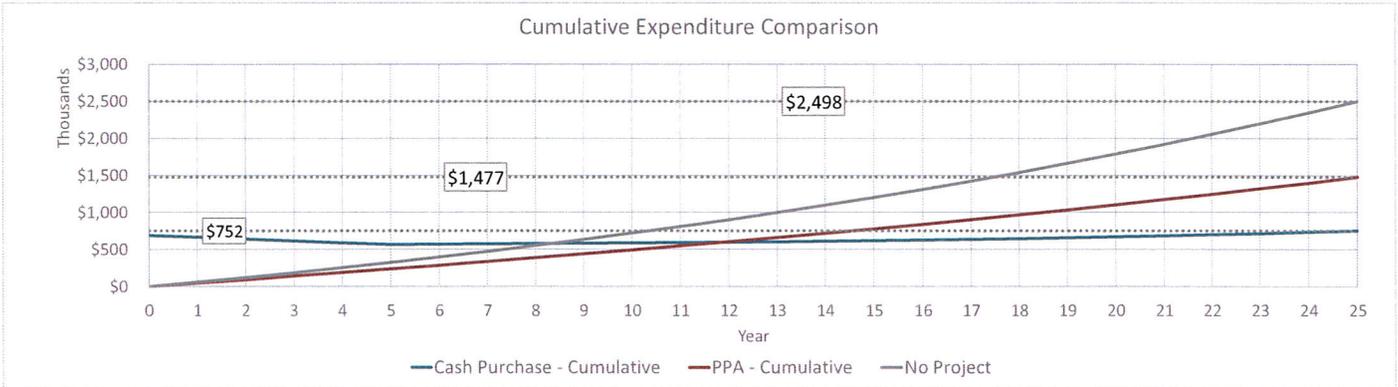
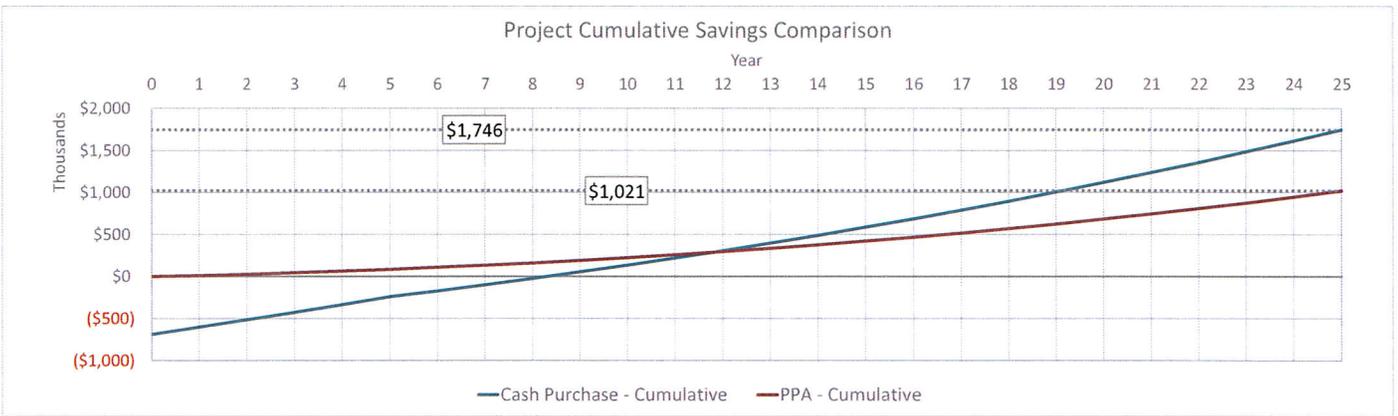
SunEdison Sheriff-Coroner - Patrol & Investigation (M3) Solar Project Summary

Ownership Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$1,585,105	\$2,401,095	\$0	\$59,672	\$62,059	\$64,542	\$67,123	\$69,808	...	\$139,877
Utility Rebate	\$131,545	\$143,575	\$0	\$29,004	\$28,859	\$28,714	\$28,571	\$28,428	...	\$0
Total Revenue	\$1,716,650	\$2,544,670	\$0	\$88,676	\$90,918	\$93,256	\$95,694	\$98,236	...	\$139,877
Costs										
Construction	(\$656,517)	(\$656,517)	(\$656,517)	\$0	\$0	\$0	\$0	\$0	...	\$0
PM, Contingency	(\$32,826)	(\$32,826)	(\$32,826)	\$0	\$0	\$0	\$0	\$0	...	\$0
O&M	(\$73,876)	(\$109,327)	\$0	(\$3,413)	(\$3,482)	(\$3,551)	(\$3,622)	(\$3,695)	...	(\$5,490)
Total Costs	(\$763,219)	(\$798,671)	(\$689,343)	(\$3,413)	(\$3,482)	(\$3,551)	(\$3,622)	(\$3,695)	...	(\$5,490)
Net Benefit	\$953,431	\$1,746,000	(\$689,343)	\$85,263	\$87,436	\$89,705	\$92,072	\$94,541	...	\$134,387

Power Purchase Agreement Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$1,585,105	\$2,401,095	\$0	\$59,672	\$62,059	\$64,542	\$67,123	\$69,808	...	\$139,877
PPA Costs	(\$939,493)	(\$1,379,699)	\$0	(\$45,951)	(\$46,636)	(\$47,331)	(\$48,036)	(\$48,752)	...	(\$65,532)
Net Benefit	\$645,612	\$1,021,396	\$0	\$13,721	\$15,423	\$17,211	\$19,087	\$21,056	...	\$74,345



Juvenile Detention Center Solar Project Summary

Site Information

Meter Number	Various
Annual Site Load (kWh/year)	2,175,400
Rate Prior to Solar	Various
Recommended Rate with Solar	Various

System Information

System Size (kW)	478.0
First Year Solar Production (kWh)	703,286
Annual System Yield (kWh/kW)	1,471
PV Degradation Rate (%/year)	0.50%

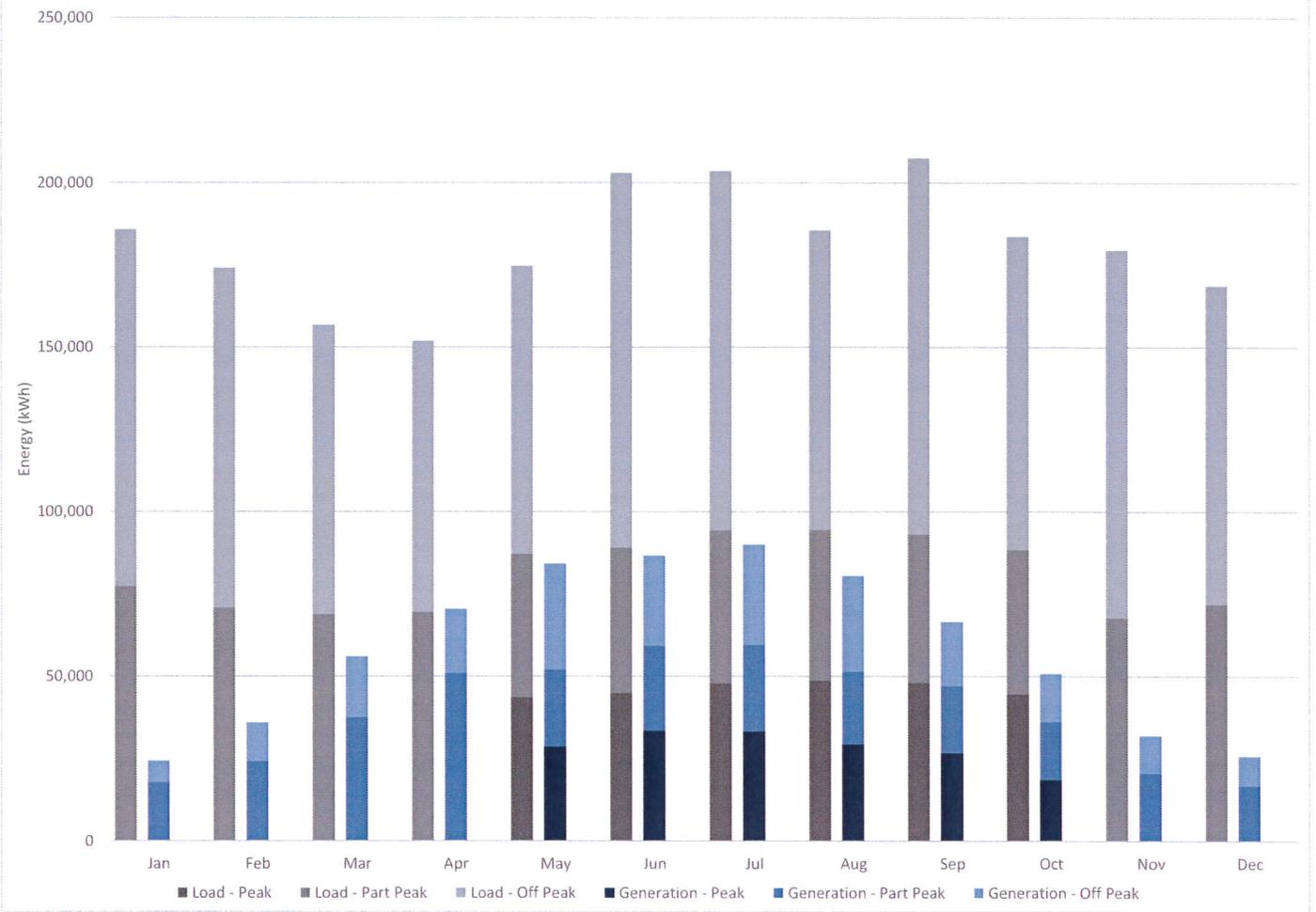
Model Assumptions

Utility Escalation Rate (%/year)	4.00%
Bill Demand Reduction (%)	Various
NPV Discount Rate (%/year)	3.00%
Analysis Lifecycle (years)	25
Incentive Rate (\$/kWh-generated)	0.09
Ownership PM, Contingency (% of Capital Costs)	5.00%
PPA PM, Contingency (Included in PPA Price)	3.50%
PM Reimbursement to Agency (PPA Only)	\$47,474

System Metrics

Year One Load Offset	32%
25 Year Bill Offset	34%
PPA	
Initial PPA Price with bundle discount (\$/kWh)	Various
PPA Escalation Rate (%/year)	Various
Ownership	
Construction Cost per Watt with bundle discount	\$2.84
Installed Cost per Watt (includes PM, O&M Costs)	\$3.30
Simple Payback Year	9

First Year Site Load and System Generation



Utility Expenditures

	NPV	SUM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	...	Year 25
Bill No Solar	(\$8,790,858)	(\$13,399,663)	(\$321,752)	(\$334,622)	(\$348,007)	(\$361,927)	(\$376,405)	(\$391,461)	...	(\$824,749)
Bill with Solar	(\$5,791,683)	(\$8,869,346)	(\$203,582)	(\$212,452)	(\$221,701)	(\$231,347)	(\$241,406)	(\$251,895)	...	(\$562,420)
Bill Savings	\$2,999,175	\$4,530,317	\$118,170	\$122,171	\$126,306	\$130,581	\$134,999	\$139,566	...	\$262,328

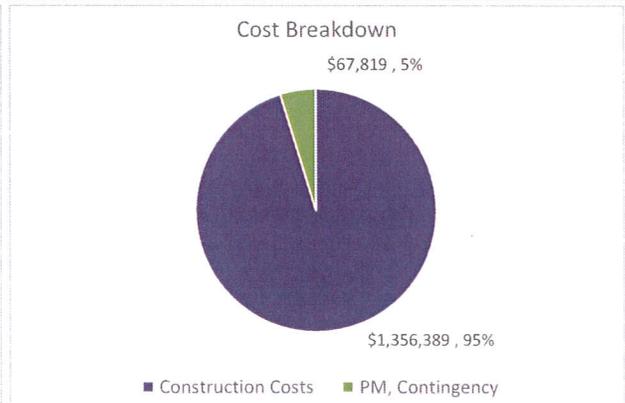
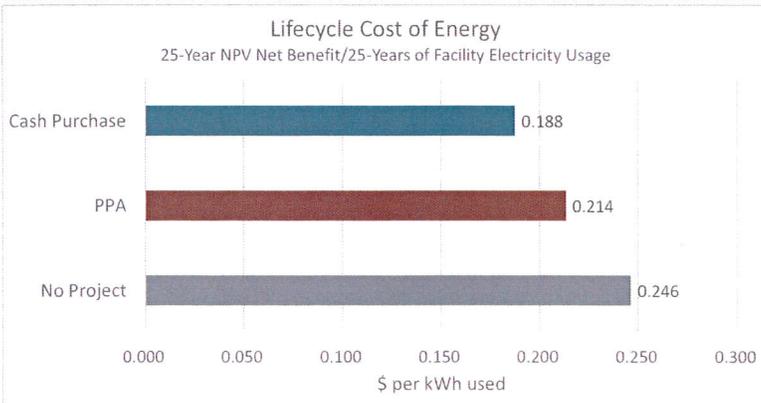
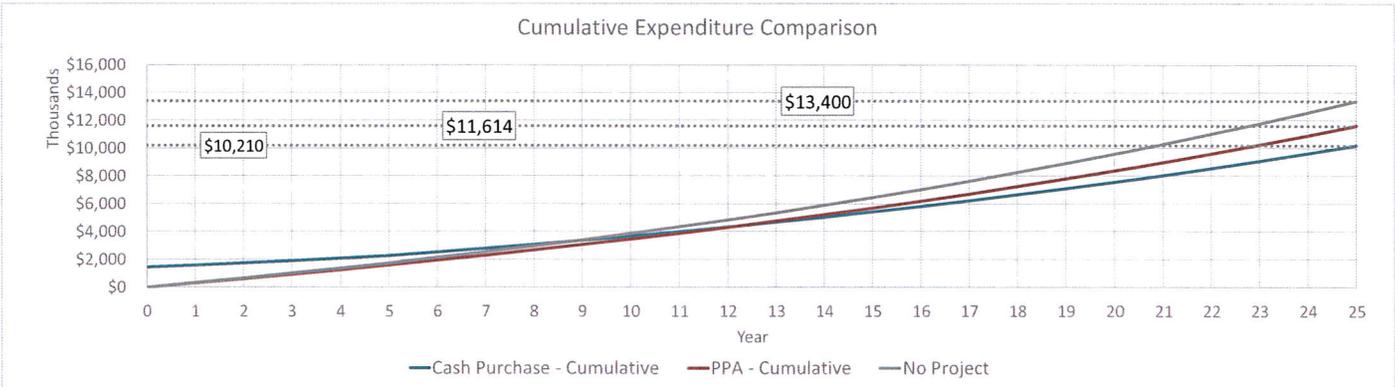
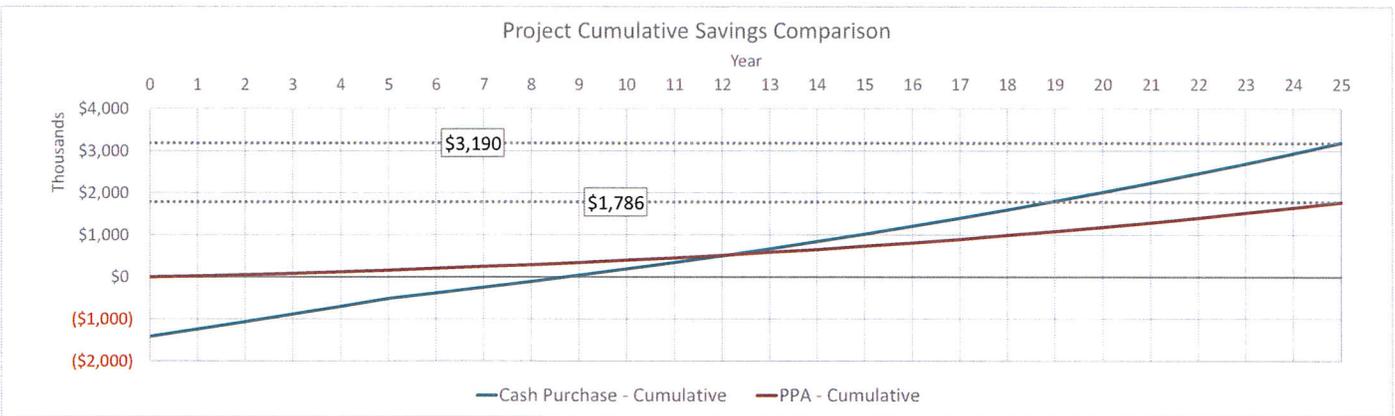
Juvenile Detention Center Solar Project Summary

Ownership Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$2,999,175	\$4,530,317	\$0	\$118,170	\$122,171	\$126,306	\$130,581	\$134,999		\$262,328
Utility Rebate	\$287,077	\$313,330	\$0	\$63,296	\$62,979	\$62,664	\$62,351	\$62,039		\$0
Total Revenue	\$3,286,252	\$4,843,647	\$0	\$181,466	\$185,150	\$188,970	\$192,932	\$197,038		\$262,328
Costs										
Construction	(\$1,356,389)	(\$1,356,389)	(\$1,356,389)	\$0	\$0	\$0	\$0	\$0		\$0
PM, Contingency	(\$67,819)	(\$67,819)	(\$67,819)	\$0	\$0	\$0	\$0	\$0		\$0
O&M	(\$155,199)	(\$229,676)	\$0	(\$7,171)	(\$7,314)	(\$7,460)	(\$7,609)	(\$7,762)		(\$11,533)
Total Costs	(\$1,579,407)	(\$1,653,885)	(\$1,424,208)	(\$7,171)	(\$7,314)	(\$7,460)	(\$7,609)	(\$7,762)		(\$11,533)
Net Benefit	\$1,706,845	\$3,189,762	(\$1,424,208)	\$174,295	\$177,836	\$181,510	\$185,322	\$189,277		\$250,795

Power Purchase Agreement Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$2,999,175	\$4,530,317	\$0	\$118,170	\$122,171	\$126,306	\$130,581	\$134,999		\$262,328
PPA Costs	(\$1,868,976)	(\$2,744,699)	\$0	(\$91,413)	(\$92,775)	(\$94,158)	(\$95,560)	(\$96,984)		(\$130,367)
Net Benefit	\$1,130,199	\$1,785,618	\$0	\$26,757	\$29,395	\$32,148	\$35,020	\$38,015		\$131,962



SunEdison Office of Emergency Services (M3) Solar Project Summary

Site Information

Meter Number	6011839455 (SVC ID)
Annual Site Load (kWh/year)	718,172
Rate Prior to Solar	E19SV
Recommended Rate with Solar	E19SV

System Information

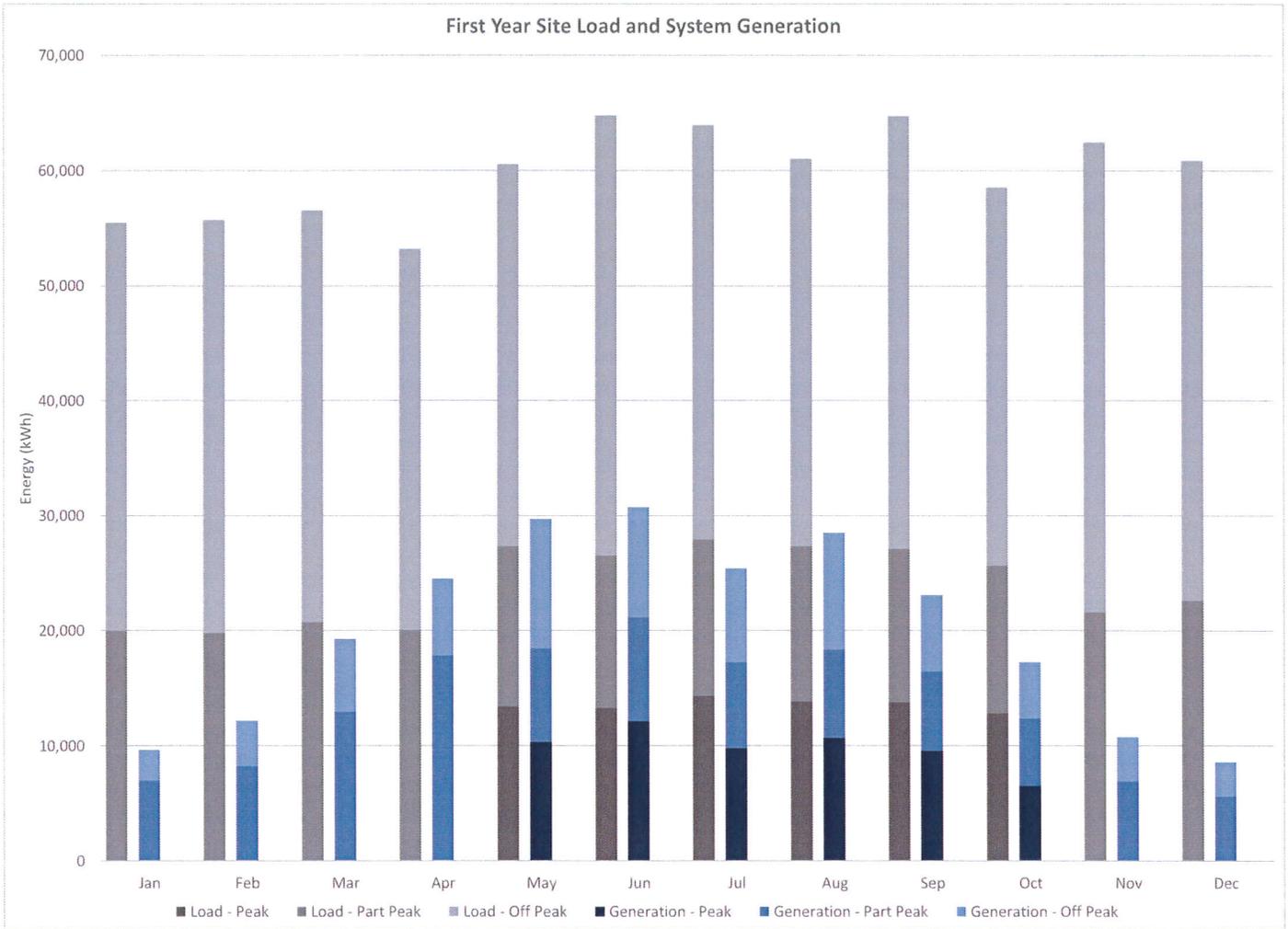
System Size (kW)	169.0
First Year Solar Production (kWh)	239,679
Annual System Yield (kWh/kW)	1,418
PV Degradation Rate (%/year)	0.50%

Model Assumptions

Utility Escalation Rate (%/year)	4.00%
Bill Demand Reduction (%)	10.00%
NPV Discount Rate (%/year)	3.00%
Analysis Lifecycle (years)	25
Incentive Rate (\$/kWh-generated)	0.09
Ownership PM, Contingency (% of Capital Costs)	5.00%
PPA PM, Contingency (Included in PPA Price)	3.50%
PM Reimbursement to Agency (PPA Only)	\$16,193

System Metrics

Year One Load Offset	33%
25 Year Bill Offset	23%
PPA	
Initial PPA Price with bundle discount (\$/kWh)	\$0.1280
PPA Escalation Rate (%/year)	2.0%
Ownership	
Construction Cost per Watt with bundle discount	\$2.74
Installed Cost per Watt (includes PM, O&M Costs)	\$3.20
Simple Payback Year	14



Utility Expenditures

	NPV	SUM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	...	Year 25
Bill No Solar	(\$2,734,745)	(\$4,168,496)	(\$100,094)	(\$104,098)	(\$108,261)	(\$112,592)	(\$117,096)	(\$121,779)	...	(\$256,571)
Bill with Solar	(\$2,117,286)	(\$3,234,421)	(\$76,048)	(\$79,215)	(\$82,513)	(\$85,948)	(\$89,524)	(\$93,249)	...	(\$201,921)
Bill Savings	\$617,459	\$934,075	\$24,045	\$24,882	\$25,748	\$26,644	\$27,571	\$28,531	...	\$54,649

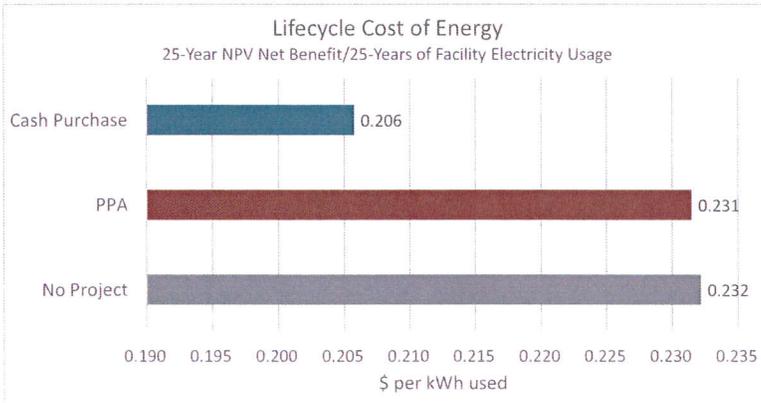
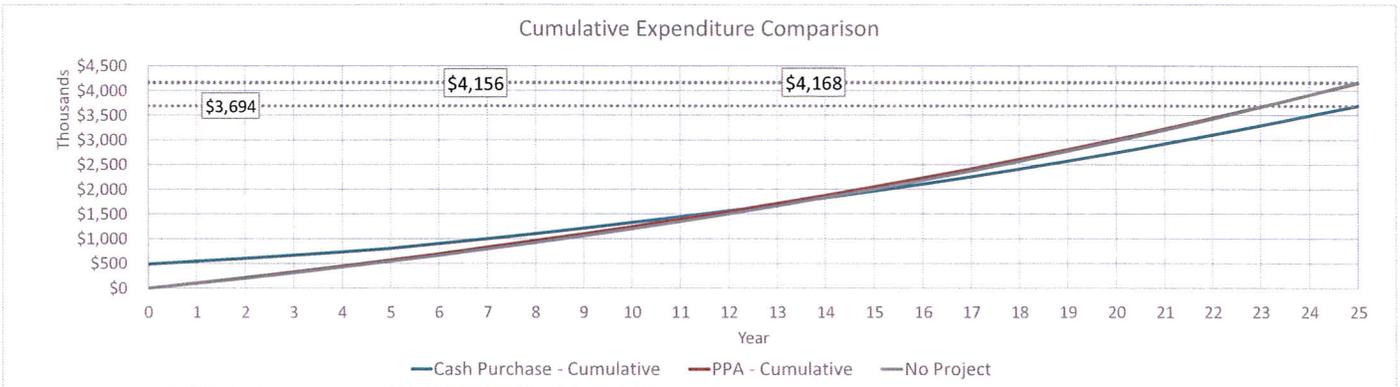
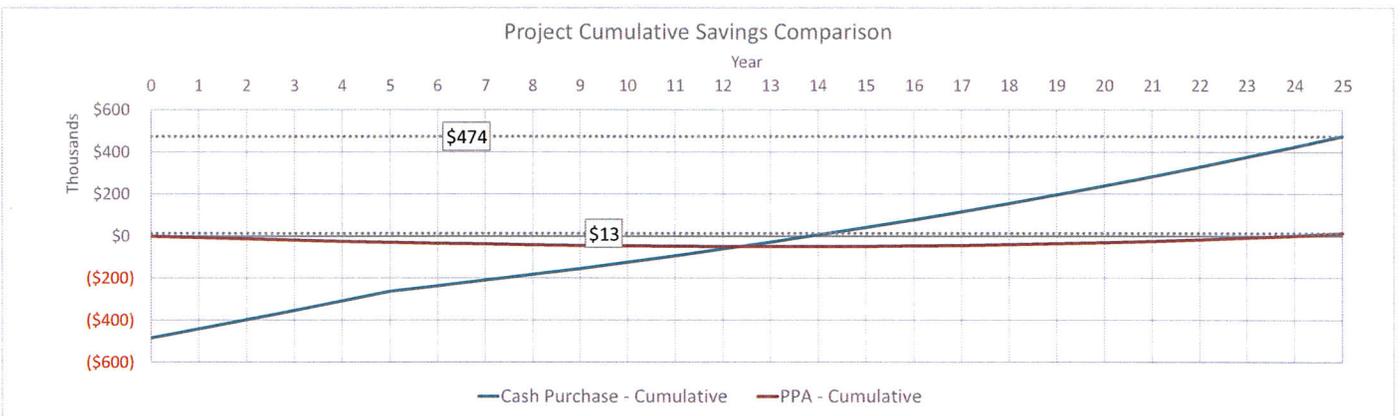
SunEdison Office of Emergency Services (M3) Solar Project Summary

Ownership Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$617,459	\$934,075	\$0	\$24,045	\$24,882	\$25,748	\$26,644	\$27,571	...	\$54,649
Utility Rebate	\$97,835	\$106,782	\$0	\$21,571	\$21,463	\$21,356	\$21,249	\$21,143	...	\$0
Total Revenue	\$715,294	\$1,040,857	\$0	\$45,616	\$46,345	\$47,104	\$47,893	\$48,714	...	\$54,649
Costs										
Construction	(\$462,647)	(\$462,647)	(\$462,647)	\$0	\$0	\$0	\$0	\$0	...	\$0
PM, Contingency	(\$23,132)	(\$23,132)	(\$23,132)	\$0	\$0	\$0	\$0	\$0	...	\$0
O&M	(\$54,776)	(\$81,062)	\$0	(\$2,531)	(\$2,581)	(\$2,633)	(\$2,686)	(\$2,739)	...	(\$4,071)
Total Costs	(\$540,556)	(\$566,842)	(\$485,780)	(\$2,531)	(\$2,581)	(\$2,633)	(\$2,686)	(\$2,739)	...	(\$4,071)
Net Benefit	\$174,739	\$474,015	(\$485,780)	\$43,086	\$43,764	\$44,471	\$45,207	\$45,975	...	\$50,579

Power Purchase Agreement Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$617,459	\$934,075	\$0	\$24,045	\$24,882	\$25,748	\$26,644	\$27,571	...	\$54,649
PPA Costs	(\$627,438)	(\$921,429)	\$0	(\$30,688)	(\$31,146)	(\$31,610)	(\$32,081)	(\$32,559)	...	(\$43,766)
Net Benefit	(\$9,979)	\$12,646	\$0	(\$6,643)	(\$6,264)	(\$5,862)	(\$5,437)	(\$4,988)	...	\$10,884



SunEdison West County Health Center - Parking Garage (M3) Solar Project Summary

Site Information

Meter Number	1335659110 (SVC ID)
Annual Site Load (kWh/year)	1,015,228
Rate Prior to Solar	E19S
Recommended Rate with Solar	A6X

System Information

System Size (kW)	403.0
First Year Solar Production (kWh)	604,762
Annual System Yield (kWh/kW)	1,501
PV Degradation Rate (%/year)	0.50%

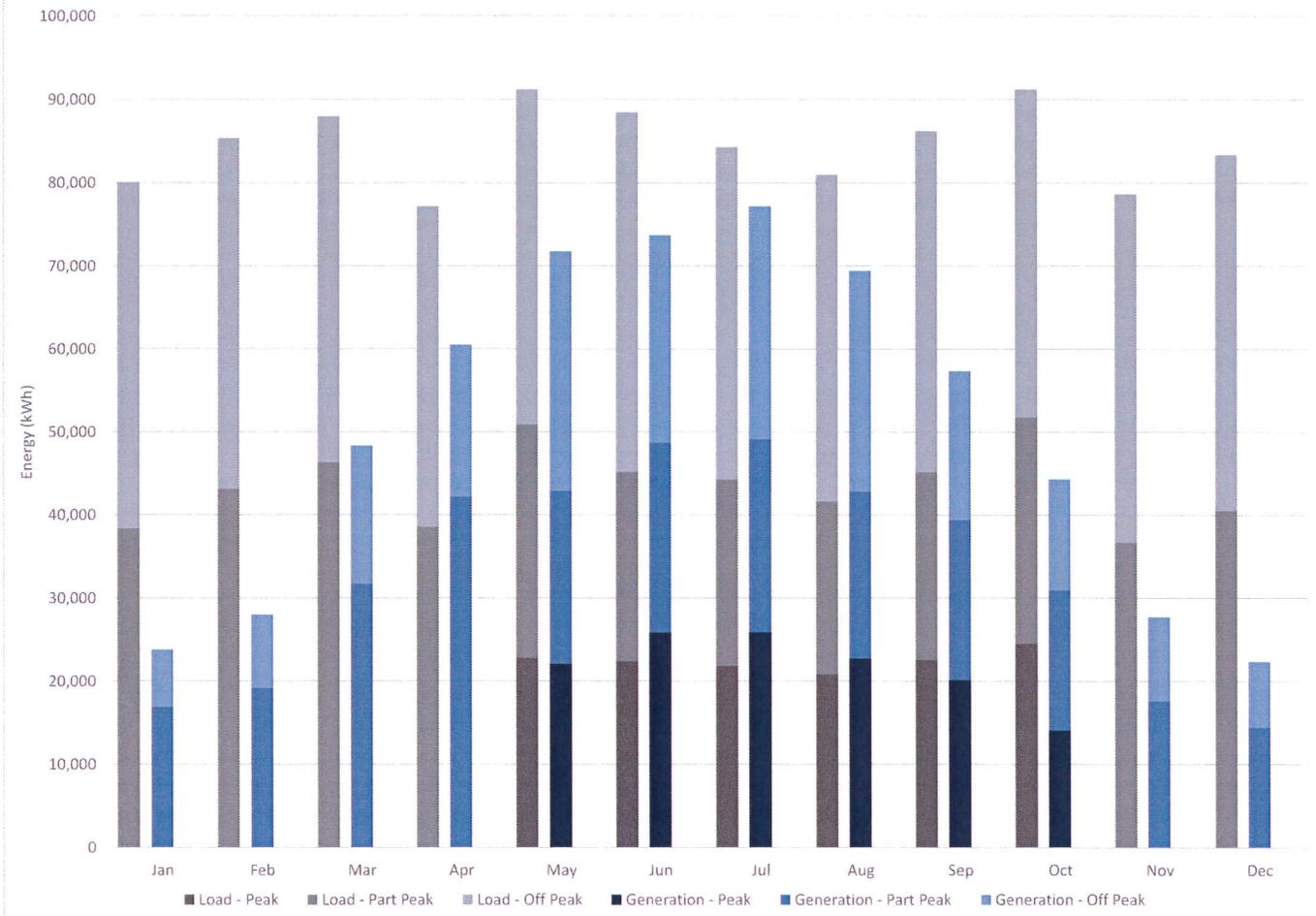
Model Assumptions

Utility Escalation Rate (%/year)	4.00%
Bill Demand Reduction (%)	0.00%
NPV Discount Rate (%/year)	3.00%
Analysis Lifecycle (years)	25
Incentive Rate (\$/kWh-generated)	0.09
Ownership PM, Contingency (% of Capital Costs)	5.00%
PPA PM, Contingency (Included in PPA Price)	3.50%
PM Reimbursement to Agency (PPA Only)	\$42,566

System Metrics

Year One Load Offset	60%
25 Year Bill Offset	56%
PPA	
Initial PPA Price with bundle discount (\$/kWh)	\$0.1280
PPA Escalation Rate (%/year)	2.0%
Ownership	
Construction Cost per Watt with bundle discount	\$3.02
Installed Cost per Watt (includes PM, O&M Costs)	\$3.49
Simple Payback Year	10

First Year Site Load and System Generation



Utility Expenditures

	NPV	SUM	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	...	Year 25
Bill No Solar	(\$4,332,320)	(\$6,603,636)	(\$158,566)	(\$164,909)	(\$171,505)	(\$178,365)	(\$185,500)	(\$192,920)	...	(\$406,454)
Bill with Solar	(\$1,926,909)	(\$2,979,976)	(\$61,803)	(\$65,029)	(\$68,411)	(\$71,955)	(\$75,670)	(\$79,561)	...	(\$200,570)
Bill Savings	\$2,405,411	\$3,623,660	\$96,763	\$99,880	\$103,094	\$106,410	\$109,830	\$113,359	...	\$205,884

Ownership Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$2,405,411	\$3,623,660	\$0	\$96,763	\$99,880	\$103,094	\$106,410	\$109,830	...	\$205,884
Utility Rebate	\$246,860	\$269,435	\$0	\$54,429	\$54,156	\$53,886	\$53,616	\$53,348	...	\$0
Total Revenue	\$2,652,271	\$3,893,095	\$0	\$151,192	\$154,036	\$156,980	\$160,026	\$163,179	...	\$205,884
Costs										
Construction	(\$1,216,165)	(\$1,216,165)	(\$1,216,165)	\$0	\$0	\$0	\$0	\$0	...	\$0
PM, Contingency	(\$60,808)	(\$60,808)	(\$60,808)	\$0	\$0	\$0	\$0	\$0	...	\$0
O&M	(\$130,694)	(\$193,412)	\$0	(\$6,038)	(\$6,159)	(\$6,282)	(\$6,408)	(\$6,536)	...	(\$9,712)
Total Costs	(\$1,407,666)	(\$1,470,385)	(\$1,276,973)	(\$6,038)	(\$6,159)	(\$6,282)	(\$6,408)	(\$6,536)	...	(\$9,712)
Net Benefit	\$1,244,605	\$2,422,711	(\$1,276,973)	\$145,154	\$147,877	\$150,697	\$153,618	\$156,642	...	\$196,171

Power Purchase Agreement Cash Flow

Revenue	NPV	SUM	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	...	Year 25
Bill Savings	\$2,405,411	\$3,623,660	\$0	\$96,763	\$99,880	\$103,094	\$106,410	\$109,830	...	\$205,884
PPA Costs	(\$1,583,162)	(\$2,324,965)	\$0	(\$77,434)	(\$78,587)	(\$79,758)	(\$80,947)	(\$82,153)	...	(\$110,430)
Net Benefit	\$822,249	\$1,298,695	\$0	\$19,330	\$21,292	\$23,336	\$25,463	\$27,678	...	\$95,453

