Solar Proposal

For

Mississippi Valley Library District

408 West Main St., Collinsville, IL 62234

4444 Collinsville Rd., Fairmont City, IL 62201

September 12, 2025

Erik Schultz – Energy Advisor
Advanced Renewable Concepts, ARC
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www.joinarc.io

THANK YOU

Thank you for your time and attention to this solar evaluation.

Advanced Renewable Concepts (ARC) is providing this solution utilizing the Illinois Solar for All (ILSFA) and other incentive programs. This summary includes system, production, warranty, process and pricing information. Please review and feel free to call with questions.

SOLAR SOLUTION – 408 W Main St., Collinsville, IL 62234

66.22 kW Roof Mount Solar System

1. 154 Jinko 430N BLK/BLK Panels or similar to maximize roof production
2. **Performance Monitoring**
3. Grid-Tied Configuration – 3 Phase
4. Engineering, permitting, all parts, **standard racking**, switches, conduit and installation needed to install a code compliant system
5. 15-year ARC Warranty – All Parts, Labor, Production, Monitoring and Penetrations
6. 25-year manufactures warranty

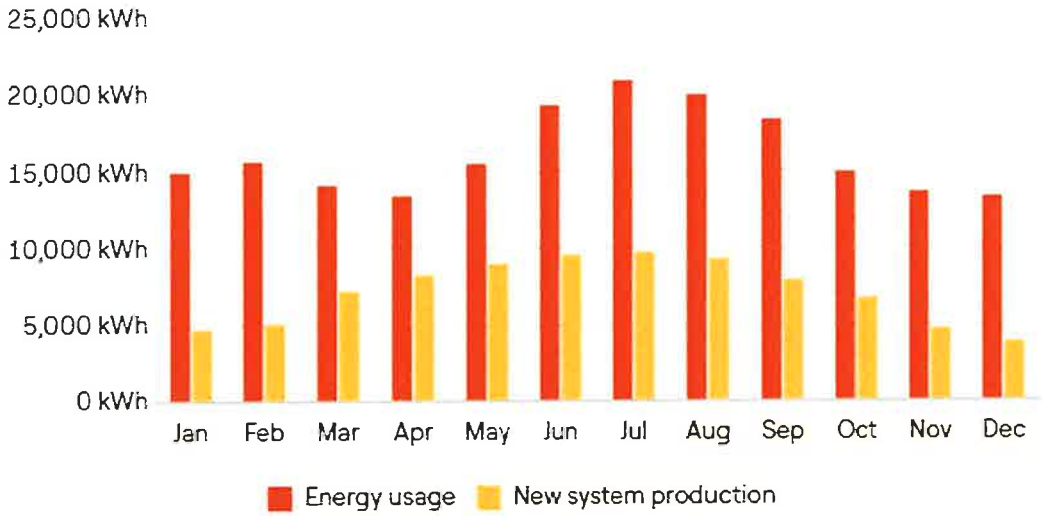
ENERGY PRODUCTION – 408 W Main St., Collinsville, IL 62234

194,480 kWh/yr *Estimated* Historic Energy Use – *last 12 months*

86,300 kWh/yr Estimated Solar Energy Production – *from Aurora design tool*

44 % Energy Offset – *roof size is a limitation*

Production vs. Consumption



ALTERNITIVE SOLAR SOLUTION

408 W Main St., Collinsville, IL 62234

This is a possible solution if it is determined that mounting to the synthetic slate is not a good idea. A site survey is required to review structure and mounting options.

41.28 kW Roof Mount Solar System

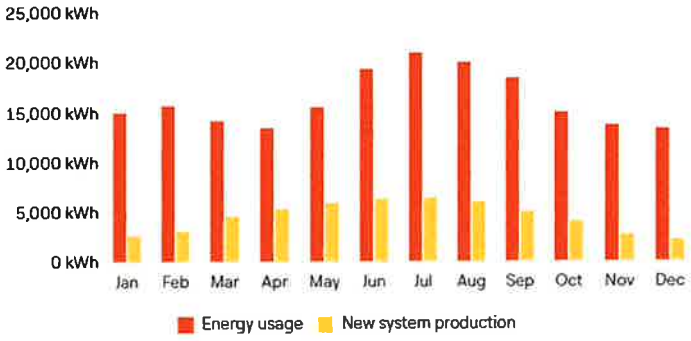
1. 96 Jinko 430N BLK/BLK Panels or similar to maximize roof production
2. **Performance Monitoring**
3. Grid-Tied Configuration – 3 Phase
4. Engineering, permitting, all parts, **standard racking**, switches, conduit and installation needed to install a code compliant system
5. 15-year ARC Warranty – All Parts, Labor, Production, Monitoring and Penetrations
6. 25-year manufactures warranty

ENERGY PRODUCTION

194,480 kWh/yr - *Estimated* Historic Energy Use *– last 12 months*

54,335 kWh/yr - Estimated Solar Energy Production – *from Aurora design tool*

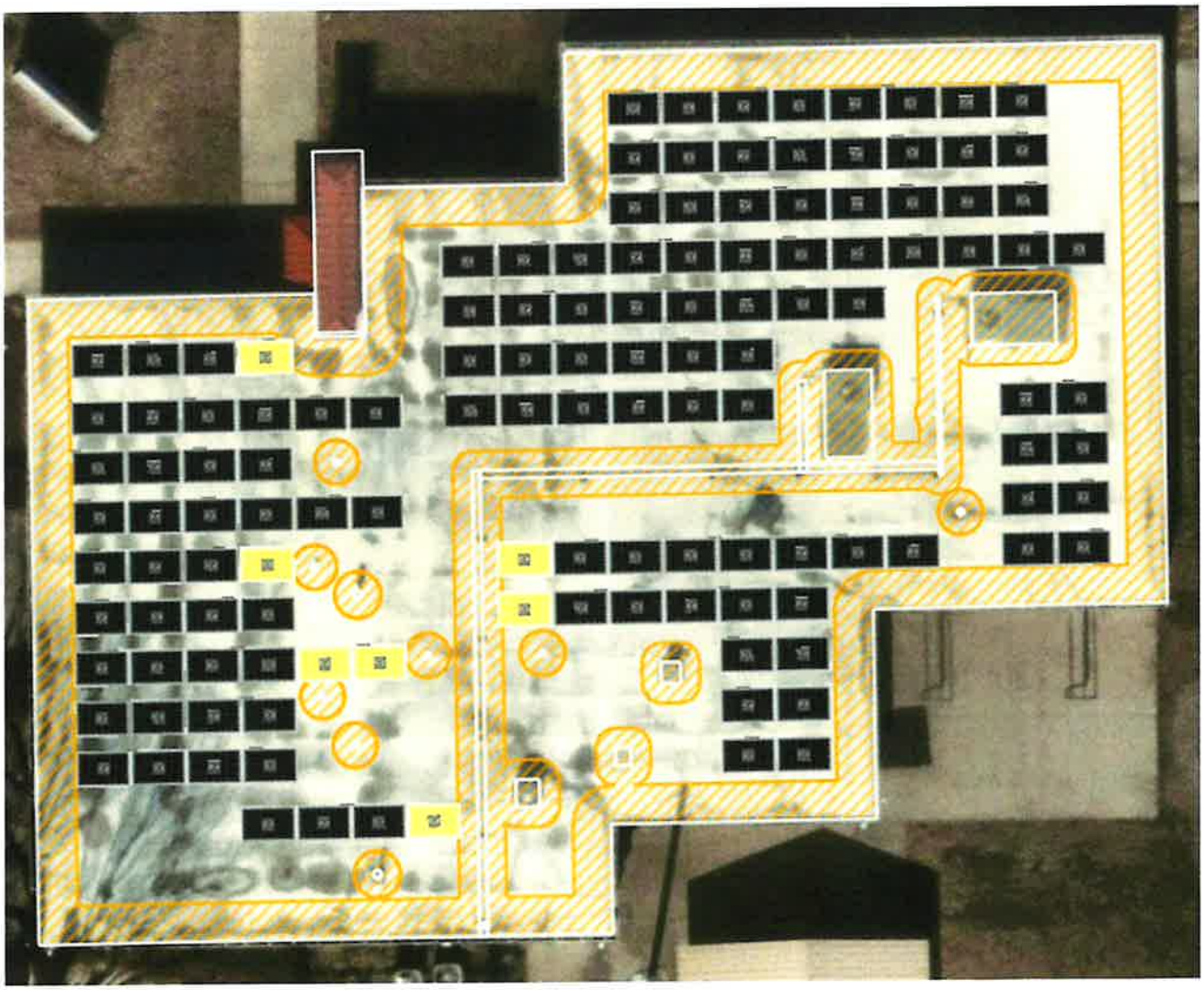
28 % - Energy Offset – *roof size is a limitation*



SOLAR SOLUTION – 4444 Collinsville Rd., Fairmont City, IL 62201

55.90 kW Roof Mount Solar System

1. 130 Jinko 430N BLK/BLK Panels or similar to maximize roof production
2. **Performance Monitoring**
3. Grid-Tied Configuration
4. Engineering, permitting, all parts, **standard racking**, switches, conduit and installation needed to install a code compliant system
5. 15-year ARC Warranty – All Parts, Labor, Production, Monitoring and Penetrations
6. 25-year manufactures warranty



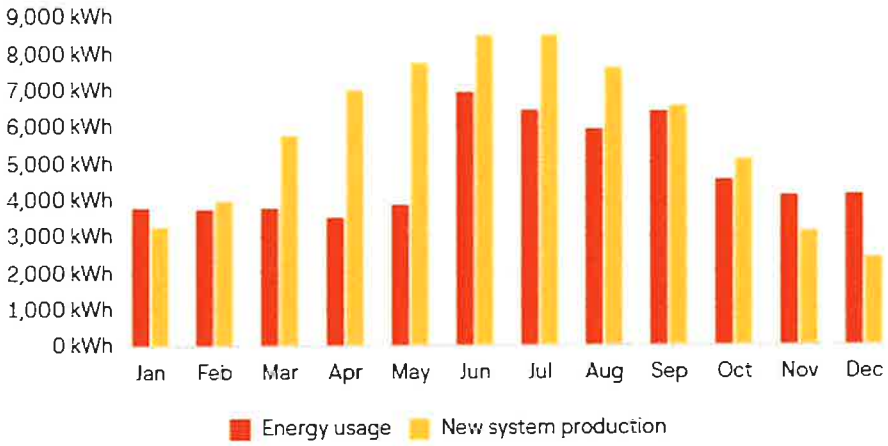
ENERGY PRODUCTION – 4444 Collinsville Rd, Fairmont City, IL

57,131 kWh/yr *Estimated* Historic Energy Use – *last 12 months*

69,509 kWh/yr Estimated Solar Energy Production – *from Aurora design tool*

122 % Energy Offset – *roof size is a limitation*

Production vs. Consumption



FINANCIAL CONSIDERATIONS

Advanced Renewable Concepts (ARC) is providing this solar solution utilizing the Illinois Solar for All (ILSFA) and other incentive programs.

$0.00 – Cost per Project

As proposed, the incentives received will cover the cost of the project. When this happens, ARC does not bill the customer.
The Advanced Renewable Concept's (ARC) 15-year Power Purchase Agreement (PPA) is unique and does not follow industry standard expectations. The PPA financial model allows ARC to accumulate all available incentives into a single transaction to minimize customer investment and simplify project budgeting. The customer maintains 100% of the benefit of the energy produced.
***A 15-year agreement minimizes customer commitment and maximizes flexibility.

Monthly Payment	$0.00
Number of Payments	0
Upfront Costs	$0.00
Cost / kWh Produced	$0.00
Access to Energy Produced	100%

Disclaimers

Pricing is based on standard installation expectations. ARC will determine if there is any deviation required and additional costs after the site survey. We have identified the following list of initial concerns to give special attention during the site survey. Additional items may be found during the site survey. All amounts will be disclosed and agreed upon before moving the project forward.

1. Standard pitched and ballasted flat roof racking is included. If the synthetic slate roofing and roof structure requires specialized racking at additional cost, this cost will need to be passed onto the customer. An additional option for 408 W Main was provided that avoids the synthetic slate roofing.

2. The electrical interconnections need review

3. Ground Mounts – If it determined a ground mount system is preferred, there are additional costs

NET METERING – Ameren IL

Net metering allows customers to send excess solar energy to the grid in exchange for energy credits to be used later. Ameren IL net metering currently provides a SUPPLY kilowatt credit for each kilowatt provided (1:1 Supply Only). Net metering terms and credit amounts could change over time.

Website link & details:
https://www.ameren.com/illinois/residential/supply-choice/renewables/solar

Estimated Savings

Option 1	Supply Size	Consumption	Production	Year 1 Savings	15-Year Savings
408 W Main St.	**66.22 kW**	~~194,480~~	**86,298**	$11,818.51	$236,648.99
4444 Collinsville Rd.	**55.90 kW**	**57,131**	~~69,508~~	$6,822.09	$136,602.72
Totals				$18,640.60	**$373,251.71**

Option 2 - Flat Only	Supply Size	Consumption	Production	Year 1 Savings	15-Year Savings
408 W Main St.	**41.28 kW**	~~194,480~~	**54,335**	$7,441.18	$148,999.08
4444 Collinsville Rd.	**55.90 kW**	**57,131**	~~69,508~~	$6,822.09	$136,602.72
Totals				$14,263.27	**$285,601.80**

Savings are based on a 4% energy supply cost escalator.

PROCESS

The typical approval and installation process takes 45-120 days. ARC will do the work and documentation needed to process the order. However, the customer needs to review and approve the documents. A Project Manager (PM) will be assigned to assist with the installation process.

1. Discovery Process & Site Surveys
2. Review & approve the ARC solution
3. Contracting
4. ILSFA Part 1 Submission
5. Local permitting
6. Utility Net-Metering agreement
7. Installation
8. Local inspection
9. Utility inspection & activation

Thank you,

Erik Schultz – Energy Advisor
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Part of ARC's proposal

Mississippi Valley Library District (MVLD)

408 W Main St., Collinsville, IL 62234	66.22 kW	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average
Acct #: 25288-04006	Electric, *3-Phase*	14,960	15,680	14,160	13,440	15,520	19,360	20,960	20,000	18,400	14,960	13,680	13,360	194,480	16,207
DS-2 Small Generation	Supply Cost	1,725.64	1,808.69	1,633.36	1,550.30	1,818.57	2,182.84	2,363.24	2,255.00	2,100.11	1,725.64	1,577.99	1,541.08	$ 22,282.46	$ 1,856.87
Homefield Energy .1146	Delivery Cost	652.76	680.85	621.87	593.59	674.23	1890.11	1709.32	1641.48	1506.20	881.11	573.53	576.62	$ 12,001.67	$ 1,000.14
	TOTAL COST	**2,378.40**	**2,489.54**	**2,255.23**	**2,143.89**	**2,492.80**	**4,072.95**	**4,072.56**	**3,896.48**	**3,606.31**	**2,606.75**	**2,151.52**	**2,117.70**	**$ 34,284.13**	**$ 2,857.01**
	PRODUCTION	4,729	5,087	7,234	8,275	9,005	9,587	9,776	9,322	7,942	6,743	4,721	3,877	86,298	7,192
	Electric Offset %	32%	32%	51%	62%	58%	50%	47%	47%	43%	45%	35%	29%		
	Supply Savings - 100% @ .1146	541.94	582.97	829.02	948.32	1,031.97	1,098.67	1,120.33	1,068.30	910.15	772.75	541.03	444.30	$ 9,889.75	$ 824.15
	Direct Use Savings - 75% @ .0298	105.69	113.69	161.68	184.95	201.26	214.27	218.49	208.35	177.50	150.71	105.51	86.65	$ 1,928.76	$ 160.73
	TOTAL ESTIMATED SAVINGS	**647.64**	**696.66**	**990.70**	**1,133.26**	**1,233.23**	**1,312.94**	**1,338.82**	**1,276.65**	**1,087.66**	**923.45**	**646.54**	**530.96**	**$ 11,818.51**	**$ 984.88**
				First Year Savings	**11,818.51**			**15 Year Savings**	**236,648.99**		**20 Year Savings**	**351,932.55**		**Savings %**	**34%**

408 W Main St. - **Flat Roof Only**	41.28 kW	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average
Acct #: 25288-04006	Electric, *3-Phase*	14,960	15,680	14,160	13,440	15,520	19,360	20,960	20,000	18,400	14,960	13,680	13,360	194,480	16,207
DS-2 Small Generation	Supply Cost	1,725.64	1,808.69	1,633.36	1,550.30	1,818.57	2,182.84	2,363.24	2,255.00	2,100.11	1,725.64	1,577.99	1,541.08	$ 22,282.46	$ 1,856.87
Homefield Energy .1146	Delivery Cost	652.76	680.85	621.87	593.59	674.23	1890.11	1709.32	1641.48	1506.20	881.11	573.53	576.62	$ 12,001.67	$ 1,000.14
	TOTAL COST	**2,378.40**	**2,489.54**	**2,255.23**	**2,143.89**	**2,492.80**	**4,072.95**	**4,072.56**	**3,896.48**	**3,606.31**	**2,606.75**	**2,151.52**	**2,117.70**	**$ 34,284.13**	**$ 2,857.01**
	PRODUCTION	2,710	3,084	4,567	5,310	5,898	6,317	6,427	6,028	5,009	4,097	2,724	2,164	54,335	4,528
	Electric Offset %	18%	20%	32%	40%	38%	33%	31%	30%	27%	27%	20%	16%		
	Supply Savings - 100% @ .1146	310.57	353.43	523.38	608.53	675.91	723.93	736.53	690.81	574.03	469.52	312.17	247.99	$ 6,226.79	$ 518.90
	Direct Use Savings - 75% @ .0298	60.57	68.93	102.07	118.68	131.82	141.18	143.64	134.73	111.95	91.57	60.88	48.37	$ 1,214.39	$ 101.20
	TOTAL ESTIMATED SAVINGS	**371.13**	**422.35**	**625.45**	**727.20**	**807.73**	**865.11**	**880.18**	**825.53**	**685.98**	**561.08**	**373.05**	**296.36**	**$ 7,441.18**	**$ 620.10**
				First Year Savings	**7,441.18**			**15 Year Savings**	**148,999.08**		**20 Year Savings**	**221,583.99**		**Savings %**	**22%**

4444 Collinsville Rd.	55.90 kW	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average
Fairmont City, IL 62201	Electric Use	3,777	3,736	3,768	3,517	3,859	6,935	6,441	5,921	6,408	4,538	4,106	4,125	57,131	4,761
Acct #: **87662-01130**	Supply Cost	435.68	430.96	434.64	405.68	454.44	781.92	726.22	667.59	733.95	523.46	473.63	475.82	6,543.99	545.33
DS-2 Small Generation	Delivery Cost	105.69	113.69	161.68	184.95	201.26	214.27	218.49	208.35	177.50	150.71	105.51	86.65	1,928.76	160.73
Homefield Energy .1145	**TOTAL COST**	**541.37**	**544.65**	**596.32**	**590.63**	**655.70**	**996.19**	**944.71**	**875.94**	**911.45**	**674.17**	**579.14**	**562.47**	**8,472.75**	**706.06**
	PRODUCTION	3,264	3,969	5,747	6,994	7,738	8,492	8,488	7,603	6,566	5,098	3,135	2,414	69,508	5,792
	Electric Offset %	86%	106%	153%	199%	201%	122%	132%	128%	102%	112%	76%	59%		
	Supply Savings - 95% @ .1145	355.04	406.38	409.86	382.56	419.76	754.35	700.62	644.06	697.03	493.62	341.01	262.58	5,866.89	977.81
	Direct Use Savings - 55% @ .0322	57.81	66.16	66.73	62.29	68.34	122.82	114.07	104.86	113.49	80.37	55.52	42.75	955.21	79.60
	TOTAL ESTIMATED SAVINGS	**412.85**	**472.55**	**476.60**	**444.85**	**488.11**	**877.17**	**814.69**	**748.92**	**810.52**	**573.99**	**396.53**	**305.33**	**6,822.09**	**568.51**
				First Year Savings	**6,822.09**			**15 Year Savings**	**136,602.82**		**20 Year Savings**	**203,148.88**		**Savings %**	**81%**

Mississippi Valley Library District

ILSFA Opportunity

August 25, 2025

MVLD

Mississippi Valley Library District

ARF SOLAR

About ARF Solar

ARF Solar is an expert in Union Solar Construction, with 50 years of IBEW construction experience.

Founded in 2018, ARF Solar has grown our total staff to 40 employees.

Tailoring our project skill set to Solar Developers, we pride ourselves in consistent smooth transactions.

Clean Credits is a subsidiary of ARF Solar that aggregates SRECs for EPCs. We are EEC Approved Vendors of both IL Shines and IL Solar for All.

We believe in uncompromising integrity and unparalleled performance in all that we do. This extends to quality engineering, procurement, and construction. This culture has made ARF Solar one of the most trusted EPCs and solar PV integrators in Southern Illinois

Certifications: North American Board of Certified Energy Practitioners as Certified PV Installation Professionals, OSHA and NFPA 70E certifications, Ameren Ally, EEC, trained and certified on a widevariety of inverter maintenance requirements, and have training in all aspects of photovoltaic technology, including technical design, project management,installation, system monitoring (DAS), and related technologies. Master Electricians Licensing and Electrical Instramatech Certification. We have access to over 1,000+ certified Journeyman Electricians in Illinois.

Illinois Solar for All

NABCEP CERTIFIED PV Installation Professional

INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS

Illinois Shines

ARF Solar #2183

Certified EEC AV

Project Portfolio:
Collinsville School District

PROJECT	SIZE	TYPE	STATUS
Collinsville Middle School	811 KW	Ground Mount	Completed
Webster Elementary	258 KW	Ground & Canopy	Completed
Kreitner Elementary	201 KW	Ground Mount	Completed

Project Portfolio: Commercial Projects

PROJECT	LOCATION	SIZE	STATUS	STATUS
Village of Godfrey	Godfrey, IL	160 KW	Ground Mount	Completed
Taylorville Fire Department	Taylorville, IL	97.2 KW	Ground Mount	Completed
Winchester Manor	Wilmington, IL	110 KW	Roof Mount	Completed

Project Portfolio:
Residential

YEAR	KW DEVELOPED	REGION	TYPE
2023	1 MW+	Southern IL	Rooftop / Ground Mount
2024	1.5 MW+	Southern IL	Rooftop / Ground Mount
2025	2.5 MW+	Statewide	Rooftop / Ground Mount

TESTIMONIAL

Business Partners

BRIAN MAILLET

OWNER AND CEO OF RENEWABLE ENERGY EVOLUTION

REE places high importance in partnering with companies that have a high level of entrepreneurship, integrity, and fortitude. REE is happy to endorse ARF Solar on these important attributes. When you bring your heart and soul into a solar project, like ARF Solar does, positive results occur. We had the pleasure of ARF Solar completing solar arrays on a carport and ground mount for a school district, on rooftops for a fire station, a Church, and a Multi-Tenant Low-Income multi-tenant building. There have been challenges along the way, and Austin and his team overcame them in a very professional manner. I look forward to continuing to work with ARF now and in the future

STEVE O'ROURKE

PRESIDENT OF ENERGUIDANCE

It has been great working with Austin and his team at ARF Solar. Austin has been fair and reasonable as an installation partner, and always wants to do the right thing for the customer. I appreciate the work ethic of his team and expect great things from them as a growing company!

BKJ SOLAR

EnerGuidance

RENEWABLE ENERGY EVOLUTION

BKJ SOLAR **EnerGuidance** **Renewable Energy Evolution**

Mississippi Valley Library District
Project Summary

- Current rate structure of $0.11124/kWh through December 2026, reducing to $0.0979 per kWh from December 2026 to December 2029
- Solar provides substantial bill reduction by removing the bulk of supply cost on future utility bills
- 100% savings on electricity produced by solar system. ARF does not withhold any savings on energy produced by PV system
- State, Federal and utility incentives will be utilized to completely fund the system through a no-cost lease structure. Ownership of the PV system is given to the library seven years after energization.

ARF SOLAR

Collinsville Layout

System Size

- 184.96 kW roof mount system

Current Electrical Load

- 198.08 MWh annually
- Estimated current *supply* cost of $22,000 annually (at $0.11124/kWh)
- Estimated future *supply* cost of $19,400 annually (at $0.0979/kWh)

Future with Solar

- 205.4 MWh generated from solar annually
- Solar production exceeds annual usage
- Protection from increasing energy costs
- Estimated average savings of 60% on future utility bills, depending on time of energy usage

Collinsville Facility Costs and Incentives

Installed Cost	$453,000	Financed by ARF Solar
Solar Renewable Energy Credits	$306,000	Claimed by ARF Solar
Federal Investment Tax Credit	$100,000	Claimed by ARF Solar
Ameren Smart Inverter Rebate	$47,000	Claimed by ARF Solar
Net Cost of System	$ 0	(Installed Cost) - (Total Incentives) = $0

Fairmont City Layout

System Size

- 48.64 kW roof mounted system

Current Electrical Load

- 57.55 MWh annually
- Estimated current *supply* cost of $6,400 annually (at $0.11124/kWh)
- Estimated future supply cost of $5,600 (at $0.979/kWh)

Future with Solar

- 72.3 MWh generated from solar annually
- Solar production exceeds annual usage
- Protection from increasing energy costs
- Estimated average savings of 60% on future utility bills, depending on time of energy usage

Fairmont City Facility Costs and Incentives

Installed Cost	$134,000	Financed by ARF Solar
Solar Renewable Energy Credits	$90,000	Claimed by ARF Solar
Federal Investment Tax Credit	$30,000	Claimed by ARF Solar
Ameren Smart Inverter Rebate	$14,000	Claimed by ARF Solar
Net Cost of System	$ 0	(Installed Cost) - (Total Incentives) = $0

Environmental Benefits

277.7 MWh of clean energy annually is equivalent to:

This is equivalent to CO_2 emissions from:

27,019	gallons of gasoline consumed	23,587	gallons of diesel consumed
266,724	pounds of coal burned	3.2	tanker trucks' worth of gasoline
22.6	homes' energy use for one year	30.1	homes' electricity use for one year

This is equivalent to greenhouse gas emissions avoided by:

84.8	tons of waste recycled instead of landfilled	12.1	garbage trucks of waste recycled instead of landfilled
20,411	trash bags of waste recycled instead of landfilled	0.072	wind turbines running for a year

Next Steps

ARF SOLAR

Step 1
Non-Binding Letter of Intent Signed

Date TBD

Step 2
Site Survey, Engineering, and Permitting

Month after Step 1

Step 3
Submit Interconnection Application

2 months after Step 1

Step 4
Enter Projects into ILSFA Program

3 months after Step 1

Step 5
Construction Begins

February 2026
March 2026

Step 6
Systems Operational

April 2026
May 2026

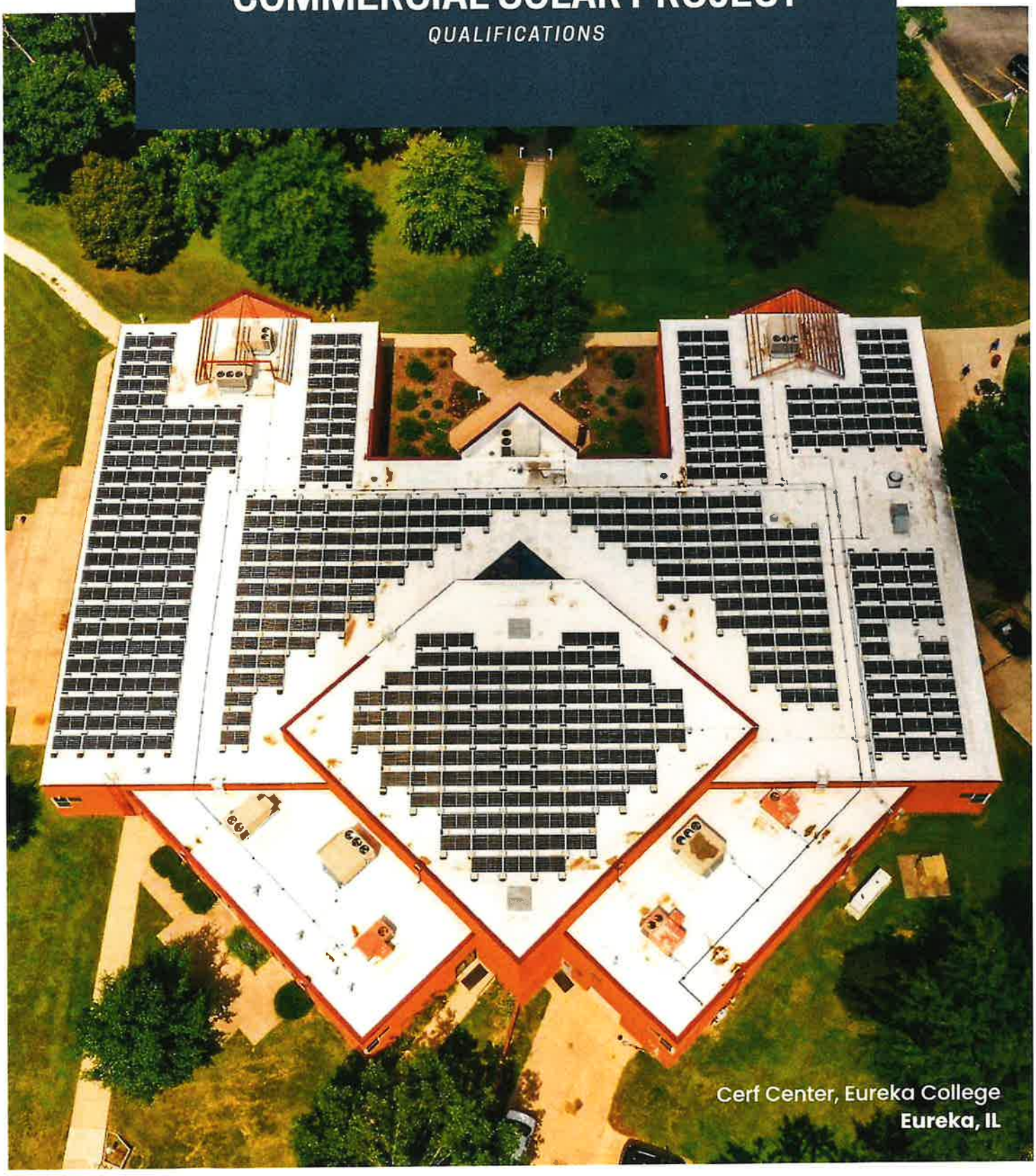
Summary

- 100% savings on energy produced by PV array
- Lease duration of 7 years. After the duration of the lease, the library owns the asset
- 15 year Operations and Maintenance Guarantee, as required by the ILSFA program
- Drastically reduce utility costs by eliminating the bulk of your supply charge each month
- Serve as a leader of renewable energy efforts in your community

StraightUp SOLAR

COMMERCIAL SOLAR PROJECT

QUALIFICATIONS



Cerf Center, Eureka College
Eureka, IL

Make the **Brighter Choice.**

Making the brighter choice by going solar means paying less on your electricity bills, having more control over your energy, and gaining a long-term return on investment into your business, community, and planet.

StraightUp Solar specializes in the development, engineering, construction, and operation and maintenance (O&M) of **high-quality solar electric generation projects.** We utilize our extensive experience, network, and partnerships to develop cost effective, turn-key solar energy systems that will deliver long-term performance for commercial, industrial, agricultural, public, non-profit, and residential clients.

Since 2006, we have been focused on our mission to rewrite our energy story and grow brighter communities. With more than 2,800 installations and an installed capacity of over 54 MW in Illinois and Missouri, StraightUp Solar is a seasoned local leader in the rapidly growing Midwest solar energy space. We differentiate ourselves from the competition through our years of experience, project management expertise, tailored financing solutions, vast network of partnerships, operational asset maintenance, and a service team that will be here to care for you system for years to come.

StraightUp SOLAR

StraightUpSolar.com

Uplift Your Energy

Certified B Corporation

St. Louis, MO
(314) 218-2663

Bloomington, IL
(309) 260-2663

Marion, IL
(618) 492-2663

SO MUCH MORE THAN

StraightUp Solar

StraightUp Local

Founded and headquartered in St. Louis, Missouri with development and installation offices in Bloomington and Marion, Illinois. Interconnection agreements with over 50 utilities.

StraightUp Passionate

Certified Benefit Corp (B-Corp) since 2015 with a commitment to high social and environmental performance.

StraightUp Guaranteed

Our in-house service team ensures that systems are performing as expected in accordance with industry-leading guarantees and warranty commitments. Our installations come with long-lasting warranties and a performance production warranty.

StraightUp Growing

Leading solar EPC company in operation since 2006 in Missouri and Illinois with over 2800 installations and projects as large as 2 MW.

StraightUp Experts

More than 100 team members with expertise and experience in construction, electrical, project management, commissioning, O&M, procurement, permitting, and compliance.

StraightUp Values

At StraightUp Solar, every decision we make is guided by our CLEARE Values: Care for **C**ommunity, **L**ead the Energy Transition, **E**ducate Everyone, **A**dvocate with Purpose, **R**espect People & Planet, and **E**mbody Excellence.

StraightUp Connected

StraightUp Solar participates in national and statewide solar industry associations to advocate for solar policy and the advancement of renewables.

StraightUp Partners

Member of Amicus Solar Cooperative and founding Member of Amicus O&M Cooperative, a nationwide purchasing cooperative of 80+ top US solar companies who share best practices and comprise the third-largest buyer of solar panels in the US. Partners with select financial institutions with years of renewable energy experience.

StraightUp Solar

StraightUpSolar.com

Uplift Your Energy

Certified B Corporation

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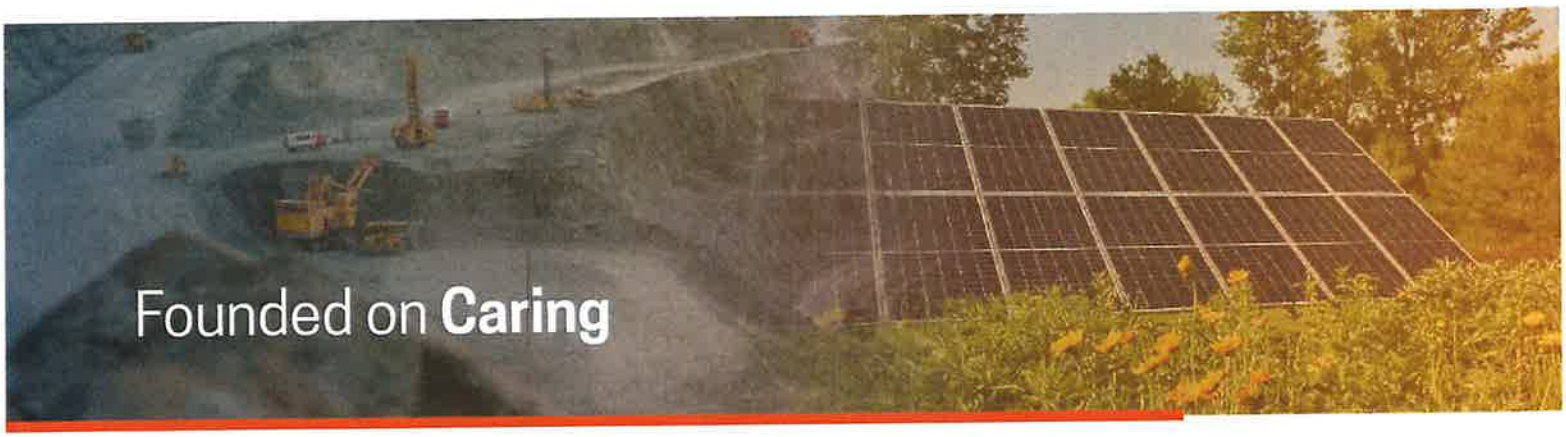

Founded on **Caring**

Dr. Dane Glueck took a less traditional approach to starting a solar company. As an orthopaedic surgeon completing his residency for surgical training in Kentucky, he witnessed firsthand the impacts of mountaintop removal mining for coal on the environment and communities. When he moved to St. Louis after residency, he decided he wanted to put solar on his home to personally offset the demand for coal-combusted power to be delivered to his home. In 2006, he was unable to find a company to do the work locally, and took matters into his own hands to become the first NABCEP certified PV installer in the state of Missouri.

He subsequently installed his solar PV system himself and began to receive requests to install panels for neighbors and small businesses, leading to what is now an 125+ personnel company with over 2,800 installations.

Dane soon became the President of the Missouri Solar Energy Industry Association and was a key player in creating and maintaining a Missouri solar rebate, which launched Missouri to deploy solar across the state. As the company started to grow, so did the number and size of projects. The team Dane has assembled is one of the most qualified and well-respected teams that can be found in the solar industry, with highly skilled engineers, business managers, policy developers, installers, and community leaders. StraightUp Solar has evolved to be the premier regional solar company, and its longevity, expertise and partnerships are unmatched in the local solar industry. Dr. Glueck continues to practice medicine while managing StraightUp Solar and remains dedicated to healing people and the planet by inspiring people to go solar.

StraightUp Solar offers **a broad portfolio of services and expertise** while continually evolving to provide emerging technology opportunities in the Midwest.

We're Here Every Step of the Way

WITH COMPREHENSIVE SERVICES

Planning

- Feasibility Studies
- Financial Analysis
- Energy Production Modeling
- Cost Estimation
- Plan Development & Array Layout

Financing

- Power Purchase Agreements
- Capital/Operating Leases
- Construction Finance
- Incentive Bridging

Design & Install

- Engineering Design
- Electrical Design
- Permitting
- Installation
- Interconnection

Operations, Maintenance, & Monitoring

- In-House Maintenance & Service
- Performance Optimization
- Data Acquisition

Marketing

- Media Outreach
- Employee & Constituent Education

BENEFIT FROM OUR

Years of Engineering Expertise

StraightUp Solar's design and engineering team has the experience, expertise, and partners which rest at the core of an optimized solar asset. Our clients receive unparalleled quality and insight that come from many years of evolving with the industry and evaluating equipment and system performance. StraightUp Solar prioritizes performance and practicality and our engineers are exceptionally skilled in their understanding of the National Electric Code and local jurisdictional and utility interconnection requirements, ensuring that our customers' projects follow a smooth path to completion.

We Know What's Possible

FEASIBILITY SERVICES INCLUDE

- Interconnection Compliance Review
- Land-Use Review
- Performance Modeling
- Code and Jurisdiction Review
- Environmental Review
- O&M Cost Analysis

Turnkey Services Ensure Success

Electrical

- AC Interconnection Plans
- Cable Schedules
- Grounding Plans
- Lightning Protection
- Single-Line & Three-Line Diagrams
- Equipment Pad Details
- Wiring Details

Civil & Survey

- Grading & Elevation
- ALTA & Boundary Surveys
- Array & BOS Layouts
- Control Room Plans
- Trench Plans
- Building Plans and Details
- Erosion Control (SWPPP)

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Structural

- Foundation Layout & Details
- Racking Elevation/Details
- Weight & Loading Analysis

Security

- Fencing Plans
- Security Plans

System Monitoring

- Data Acquisition Systems (DAS)
- Monitoring Diagrams
- Pyranometer Details
- Weather Station Details

WE PARTNER WITH SUBCONTRACTORS ***TO STREAMLINE YOUR PROJECT***

StraightUp Solar successfully partners with the most qualified electrical and engineering subcontractors in the Midwest to ensure your project is completed in the most cost-effective and timely manner. Past projects have included subcontracted relationships with Pyramid Electrical Contractors, Mid-America Electric, Inc., Goliath Tech, Burke Electric, Cell Electric, and Fresh Coast. Our relationship with Pyramid Electrical and Burke Electric provides union-labor to the installation sites.

In addition to labor partnerships, StraightUp Solar partners with LightWave Solar on the project management of large-scale commercial projects.

Safety is **Our Priority**

Safety is of the utmost importance to StraightUp Solar. Every field employee that works here is OSHA 10 (or OSHA 30) certified. Throughout the year, StraightUp Solar field crews take dozens of hours of mandatory safety training on topics such as fall protection and fall rescue, electric shock, arc flash risk, and other hazards. Our field crews are supplied with all of the fall and shock personal protection equipment (PPE) needed to keep them safe on the job.

When our field crews arrive at job sites, they have a project meeting to discuss the installation requirements and safety concerns. Our Safety Team develops checklists in consultation with the project and crew leaders to ensure proper preparation for everyone working on the site. These checklists are completed before the day's installation can begin. Our Job Hazard Analysis application integrates our project team and records. This integration allows the safety manager, field project coordinator, site supervisor, or crew lead to communicate adverse safety conditions immediately.

OUR SERVICE TEAM WILL BE

Here to Care for Your System

From monitoring and reporting, preventative maintenance to emergency repair, our highly-trained technicians have your energy generation covered. This highly-trained team includes multiple NABCEP-certified technicians. We can repair and maintain monitoring platforms and inverter platforms from: Aurora, CPS, E-Guage, Enphase, Fronius, Locus, Outback, PowerTrak, SMA, SolarEdge, Solis, Tesla, and Tigo. StraightUp Solar provides O&M services for many solar developers including GreanGrid, C2 Energy, and Generate Capital. Our service staff technicians are dispatched out of our local offices in St. Louis, Bloomington, and Marion, meaning our service team is less than a 2 hour drive away for an emergency response.

Monitoring & Reporting

- Remote monitoring
- Monitoring of alerts and notifications
- Remote diagnostics
- Performance monitoring & reporting
- Work order management

Preventive Maintenance

- Visual inspection of components
- Current & voltage measurements
- Thermal infrared (IR) scans of equipment
- Warranty management
- Mechanical inspection
- Panel cleaning
- Vegetation maintenance

Reactive Maintenance

- Onsite diagnostics
- Equipment repair and warranty service
- Removal and reinstallation

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Our Team

DR. DANE GLUECK | *PRESIDENT/FOUNDER*

Dane founded StraightUp Solar in 2006 after witnessing mountaintop removal in Appalachia during his medical residency. He wanted to inspire individuals and communities to go solar and be part of the solution. Since then, Dane has enjoyed building a team of motivated individuals equally committed to his passion for clean, renewable energy. Dane is the first NABCEP Certified PV Solar Installer in Missouri and is a founding member and former President of the Missouri Solar Energy Industries Association.

JOSH HILL | *VP OF FIELD OPERATIONS AND DESIGN*

Josh joined StraightUp Solar in 2011. He holds an Electrical Engineering degree from the University of Illinois and is a licensed Master Electrician. Josh manages the engineering, design, and installation of all solar PV systems. He has overseen several successful 1MW+ installations, requiring coordination with the company's on-site management, multiple electrical contractors, and jurisdictional permitting officials.

SHANNON FULTON | *VP OF DEVELOPMENT*

Shannon joined StraightUp Solar in 2013 to lead the company's growth in Illinois. She directs StraightUp Solar's legislative policy work and opened the Illinois 25-person office in Bloomington in 2015. Shannon started StraightUp Solar's Commercial Sales Division in 2017 and developed several large commercial and industrial projects during her tenure. She has served on the Illinois Solar Energy Association Board since 2014 and is a Solar Ambassador for WeCare Solar, a non-profit equipping rural health clinics in low-resource countries with solar power.

DOUG WIDEMAN | *VP OF SALES*

Doug's solar career began with his 2013 solar installation on his own home. Since 2018, Doug has managed sales and project development efforts for StraightUp Solar. He developed the StraightUp Solar Legacy Fund to own and operate non-profit, environmental justice, and other projects of choice. Previous to StraightUp Solar, he was the manager of small commercial sales at Real Goods Solar for the West Coast, Mid-Atlantic, and New England regions as well as their National Sales Trainer.

TOM MILLER, PE | *DIRECTOR OF SERVICE*

Tom's career experience includes performing hazardous waste investigations and remediation consulting on potable water supply projects, performing electrical bill audits, submetering and tenant billing, energy efficiency studies, and ENERGY STAR Certifications. Tom arrived at StraightUp Solar in 2018 and has served as a Residential Project Developer, Subcontractor Manager, Project Manager, Service Manager, and now Director of Service. The Service Department's staff of 14 professionals provides service to residential and commercial solar array owners, annual Operations and Maintenance contracted services for commercial customers, and removal and reinstallation of residential and commercial solar arrays to facilitate roof repairs or replacement.

DAN HANCOCK | *SENIOR COMMERCIAL PROJECT DEVELOPER*

Dan joined StraightUp Solar in 2019 bringing over a decade of solar development experience to our commercial team. Dan excels at creative project finance structuring with vast expertise in customizing federal, state, utility and local incentives to provide the best possible financial and energy performance for large energy users. With his deep knowledge of the market, utilities, technology, and finance options Dan has saved millions of dollars over the warrantied life of a solar project.

KY AJAYI | *SOLAR ACCESS MANAGER/ PROJECT DEVELOPER*

Ky joined StraightUp Solar in 2019, and he leads StraightUp Solar's efforts to connect environmental justice and income-eligible communities with the Illinois Solar for All program. He is also an Approved Vendor Aggregator for Illinois Solar for All projects. Previous to StraightUp Solar, Ky was a Political Science professor at Illinois Wesleyan, a teleradiology business manager, and environmental consultant.

CONNER ALLEN | *COMMERCIAL PROJECT DEVELOPER*

Conner joined StraightUp Solar in 2024 after 6 years of solar experience from a previous EPC, where he directed a large residential and commercial sales team. Conner is a multi-faceted developer who specializes in small to large scale commercial and industrial solar solutions from 50kW to 1+MW. Conner holds a bachelors in Renewable Energy from Illinois State University.

ADAM KIEHNA | *DIRECTOR OF OPERATIONS*

Adam joined StraightUp Solar in 2017. He grew up being outdoors and working with his hands on a cattle farm, then worked in construction in college. He got a degree in accounting from SIUE and worked for 3 years as an accountant, then decided that he wanted to reconnect with his passion for the land and working outdoors. Starting as an installer, Adam earned his NABCEP PV Installation Professional Certification in 2017, and is now the Director of Operations. He is also in his fourth year of the Independent Electrical Contractors (IEC) Apprenticeship Program. In his spare time, he and his wife are experimenting with aquaponics as a more sustainable way to grow food.

MICHAEL HARTUPEE | *COMMERCIAL PROJECT MANAGER*

Michael joined StraightUp Solar in 2016 after working as a Solar Energy Consultant, gaining experience in solar site assessment, service, and operations. Michael estimates commercial project costs and manages the project through design, procurement, installation, and close out. Prior to beginning his career in the solar industry, he graduated with a Renewable Energy Technology degree from Mineral Area College.

JAMES FISHER | *COMMERCIAL FIELD PROJECT COORDINATOR*

"Fish" leads Commercial Field Project Coordination for StraightUp Solar. He joined the team in 2012 and has served in several operational capacities over the years, including installation project coordination. He also teaches Solar 101 to StraightUp Solar's incoming class of installers. He holds a degree in Applied Science from Lewis and Clark Community College and is NABCEP PV Installation Professional certified.

COMMERCIAL **CASE STUDY**

ABOUT THE SOLAR SYSTEM

FEB 2020

Solar Capacity
115.8 kW (DC)

Est. Annual Energy
146,078 kWh

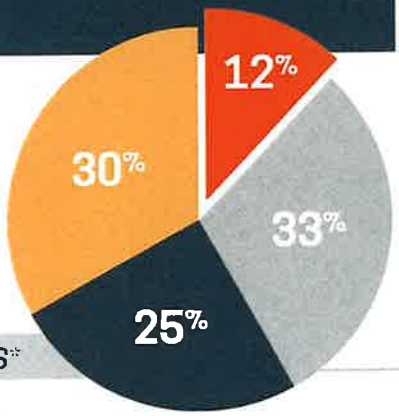
Panels
362 REC 320 Watt

Inverters
2 SMA Sunny Tripower

Paxton Hardware & Rental | Paxton, IL

$12,039	$397,388	3.6 Years
Est. First Year Savings	Est. 25-Year Savings	Payback Period

SAVINGS



INCENTIVES*

- Net Cost
- Federal Investment Tax Credit
- MACRS & Bonus Depreciation
- Solar Renewable Energy Credits

* All scenarios are unique. Your investment may differ from this example.

An investment you can be proud of.

25-YEAR ENVIRONMENTAL OFFSETS

2,439 Metric Tons of CO_2 =

- **6,128,636 Miles** Driven by Average Passenger Car
- OR **2,695,323 Pounds** of Coal Burned
- OR **2,988 Acres** Carbon Sequestered by U.S. Forests

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COMMERCIAL **CASE STUDY**

Parkway School District | St. Louis County, MO

OCT 2019

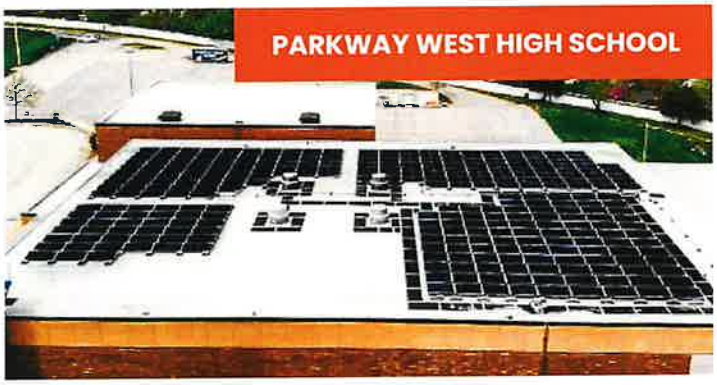
Green Trails Elementary School
Solar Capacity - 75 kW (DC)
Est. Annual Energy - 97,309 kWh
Est. 25-Year Savings - $276,417

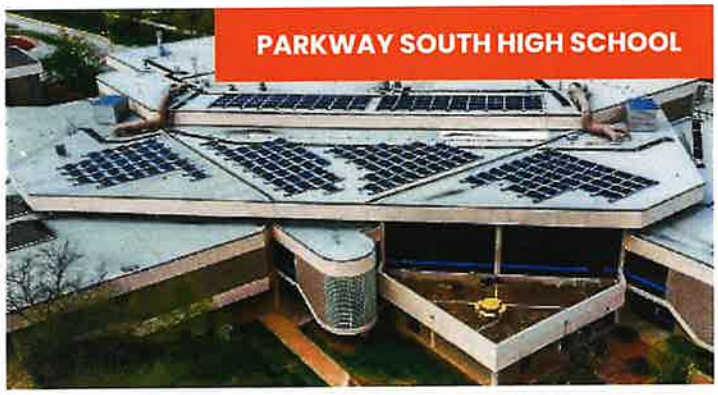
Wren Hollow Elementary School
Solar Capacity - 75 kW (DC)
Est. Annual Energy - 92,881 kWh
Est. 25-Year Savings - $270,586

Parkway West High School
Solar Capacity - 75 kW (DC)
Est. Annual Energy - 99,516 kWh
Est. 25-Year Savings - $295,689

Parkway South High School
Solar Capacity - 75 kW (DC)
Est. Annual Energy - 99,166 kWh
Est. 25-Year Savings - $296,626

SEE THE SYSTEMS **IN ACTION**





25-YEAR **ENVIRONMENTAL OFFSETS**

14.3 M Pounds of CO_2 =

16.3 M Miles Driven by Average Passenger Car

OR

7.2 M Pounds of Coal Burned

OR

7.953 Acres Carbon Sequestered by U.S. Forests

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COMMERCIAL **CASE STUDY**

City of Carbondale | Carbondale, IL

JUN 2021

Civic Center/City Hall
Solar Capacity - 216.4 kW (DC)
Est. Annual Energy - 268,271 kWh
Panels - 577 REC 375 Watt
Inverters - 2 SolarEdge
Est. 25-Year Savings - $530,465

Wastewater Treatment Plant
Solar Capacity - 830.25 kW (DC)
Est. Annual Energy - 1,135,475 kWh
Panels - 2,214 REC 375 Watt
Inverters - 5 SMA Sunny Highpower
Est. 25-Year Savings - $2,216,038

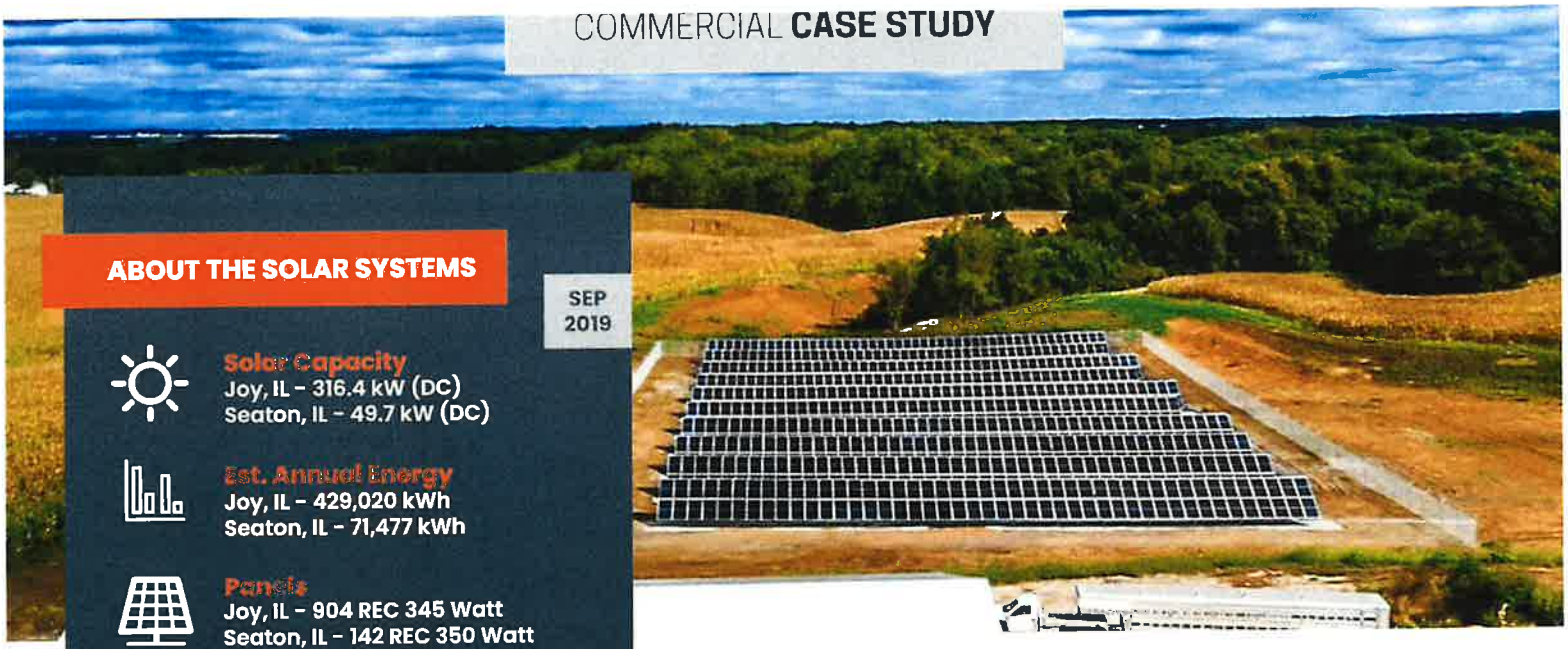
Public Safety Center
Solar Capacity - 324 kW (DC)
Est. Annual Energy - 445,087 kWh
Panels - 864 REC 375 Watt
Inverters - 5 SMA Sunny Tripower
Est. 25-Year Savings - $1,217,238

This project was a Power Purchase Agreement (PPA).

Mayor Mike Henry's Testimonial

"Our goal was to become a leader in the deployment of sustainable energy in the Southern Illinois region and with the approval of this power purchase agreement, we have a great starting point. The City will have zero capital outlay for this project and will see savings of up to $1.5M over the life of the PPA."

COMMERCIAL **CASE STUDY**



ABOUT THE SOLAR SYSTEMS

SEP 2019

Solar Capacity
Joy, IL - 316.4 kW (DC)
Seaton, IL - 49.7 kW (DC)

Est. Annual Energy
Joy, IL - 429,020 kWh
Seaton, IL - 71,477 kWh

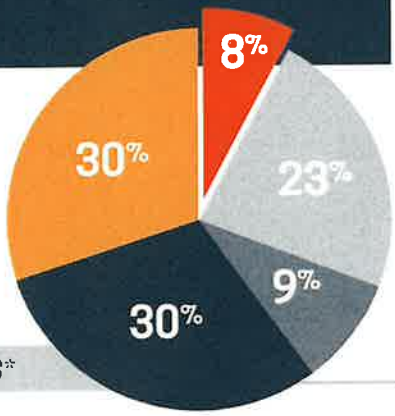
Panels
Joy, IL - 904 REC 345 Watt
Seaton, IL - 142 REC 350 Watt

Inverters
Joy, IL - 5 SMA Sunny Tripower
Seaton, IL - 5 SMA Sunny Boy

Biddle Farms | Joy, IL + Seaton, IL

$39,674	3.6 Years	3.3 Years
Est. First Year Savings	Joy Payback Period	Seaton Payback Period

SAVINGS



INCENTIVES*

- Net Cost
- Federal Investment Tax Credit
- Solar Renewable Energy Credits
- Smart Inverter Rebate
- MACRS & Bonus Depreciation

* All scenarios are unique. Your investment may differ from this example.

Miranda Biddle's Testimonial

"We were looking at putting in a larger system and from the first encounter with StraightUp Solar they knew all of the regulations and steps our system would have to adhere to. Not only were they incredibly knowledgeable about the entire solar process, but they were also friendly and easy to work with."

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COMMERCIAL **CASE STUDY**

ABOUT THE SOLAR SYSTEM

JUN 2023

Solar Capacity
907.2 kW (DC)

Est. Annual Energy
1,070,883 kWh

Panels
2016 Boviet 450W

Inverters
12 Chint Power Systems

Magnum Steel Works | Mt. Vernon, IL

$74,811	$3.2 M	$0.02/kWh
Estimated First Year Savings	Estimated 30 Year Savings	Levelized Cost of Energy

SAVINGS

Federal and State Incentives **Exceeded** Total System Cost

COSTS & INCENTIVES

- Total System Cost
- Federal Investment Tax Credit
- Solar Renewable Energy Credits
- Federal MACRS & Bonus Depreciation
- Smart Inverter Incentive
- State MACRS Depreciation

* All scenarios are unique. Your investment may differ from this example.

Magnum Steel Works Testimonial

Since installation, our power bill has dropped dramatically. The StraightUp Solar team was very professional. When they were done, there was nothing left behind to take care of."

- Jim Czerwinksi, President and CEO of Magnum Steel

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COMMERCIAL **CASE STUDY**

ABOUT THE SOLAR SYSTEM

DEC 2019

Solar Capacity
1.3 MW (DC)

Est. Annual Energy
1,734,598 kWh

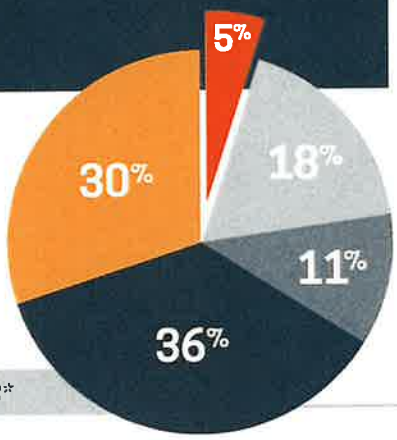
Panels
3768 REC 345 Watt

Inverters
21 SMA Sunny Tripower

Illinios Forge | Rock Falls, IL

$89,153	$3.2 M	3.3 Years
Est. First-Year Savings	Est. 30-Year Savings	Payback Period

SAVINGS



INCENTIVES*

- Net Cost
- Federal Investment Tax Credit
- Solar Renewable Energy Credits
- Smart Inverter Rebate
- MACRS & Bonus Depreciation

* All scenarios are unique. Your investment may differ from this example.

Forge Resources Group Testimonial

"We value being a good neighbor, a good member of our community, and by investing in solar, we're able to show that we're not only invested in our company internally, but we're invested in the communities that we're a part of."

- Lucas Ray, Forge Resources Group Controller

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COMMERCIAL **CASE STUDY**

ABOUT THE SOLAR SYSTEM

DEC 2019

Solar Capacity
1.87 MW (DC)

Est. Annual Energy
2,528,735 kWh

Panels
5714 REC 350 Watt

Inverter
44 Chint Power Systems String Inverters

John A. Logan College

$40,000	$1.5 M	7 Years
Est. First Year Savings	Est. 25-Year Savings	Until Ownership

SAVINGS

This project was a Power Purchase Agreement (PPA).

Excerpt From JALC Sustainability Report

"...this is enough electricity to power approximately 300 average homes in IL annually. It is calculated that at peak output, the system can provide up to 40% of our campus electrical needs."

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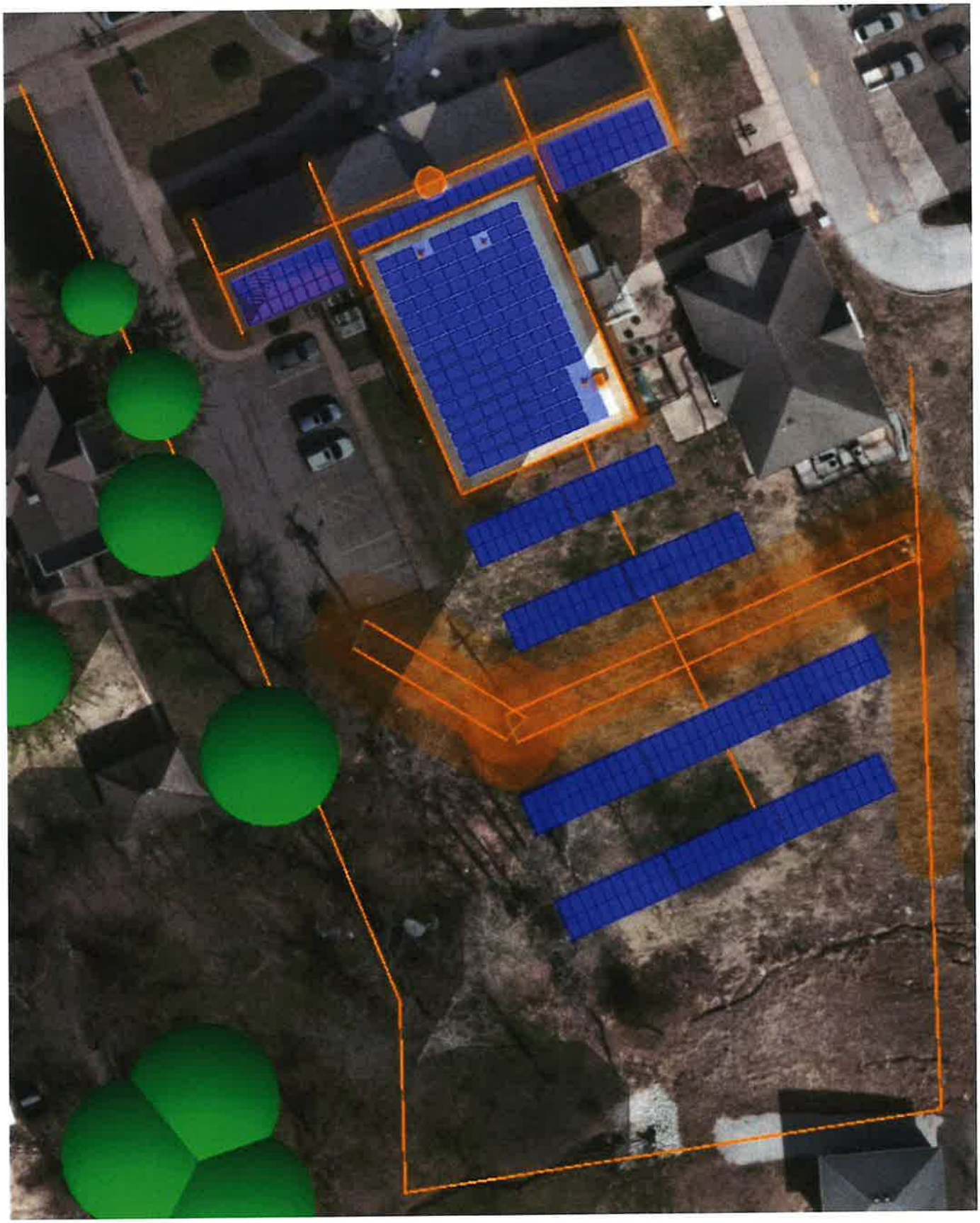

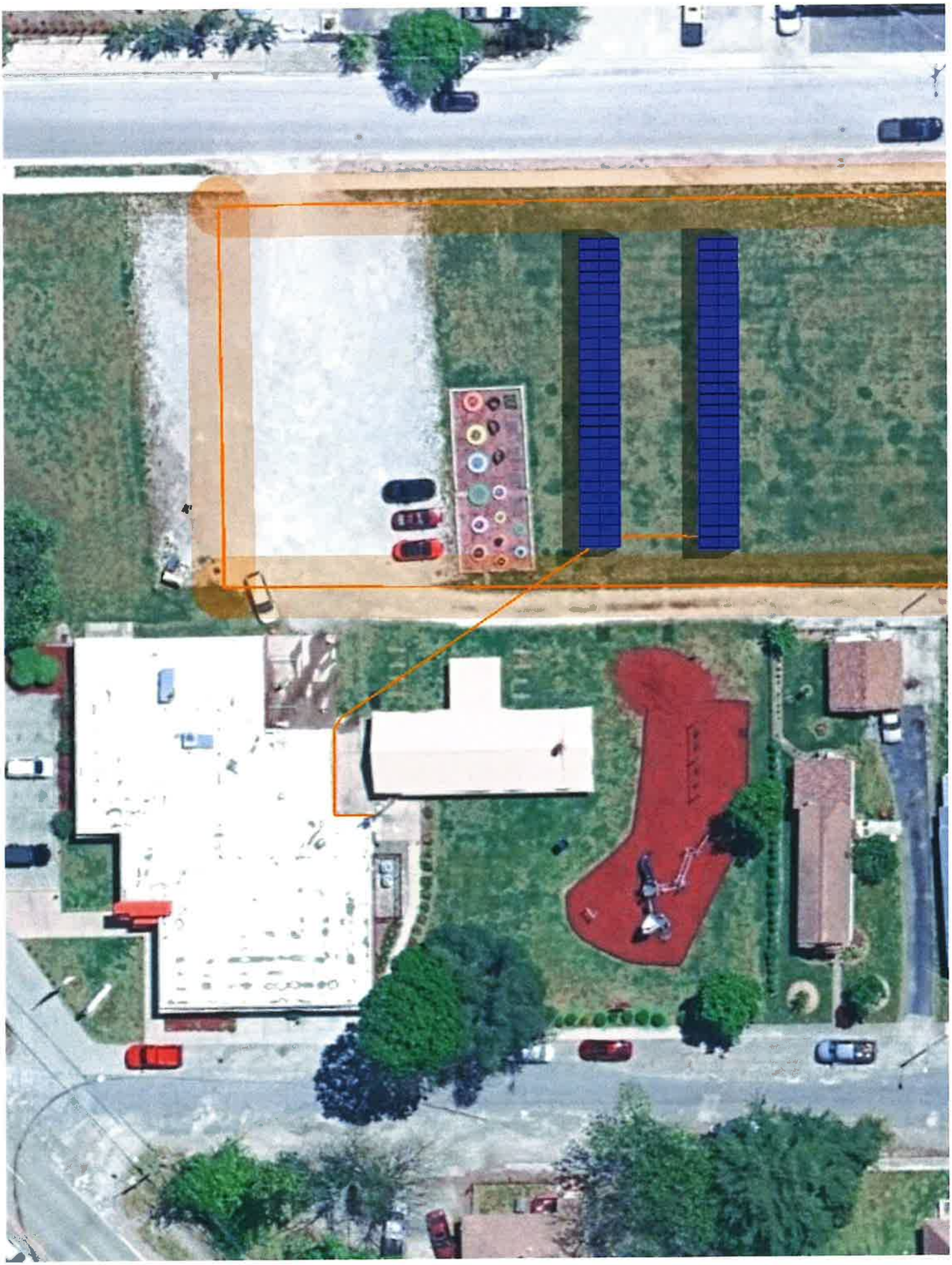

Municipal, Commercial & Non-Profit Projects Developed by Brent Ritzel in Southern Illinois

Municipal / Government Systems:

City of Carbondale
- **Southeast Wastewater Treatment Plant** - 830.25 kW
- **Department of Public Safety** – 324.0 kW
- **Civic Center / City Hall** - 216.4 kW

City of Pinckneyville Wastewater Treatment Plant 424.0 kW

Village of Marissa Wastewater Treatment Plant 231.84 kW

City of DuQuoin Wastewater Treatment Plant - 226.32 kW

Southern Illinois Multi-Modal Station (Carbondale, IL) - 105.2 kW

Illinois Department of Transportation - Scott Dome (Lebanon, IL) - 45.39 kW

Non-Profit / Houses of Worship:

Chester Community Golf Club (Chester, IL) 42.7 kW & 30.26 kW

Anna-Jonesboro Elks Lodge (Anna, IL) - 39.27 kW

First Christian Church of Carbondale (Carbondale, IL) - 28.98 kW

Carbondale Unitarian Fellowship (Carbondale, IL) 14.72 kW

Church of the Good Shepherd (Carbondale, IL) 8.28 kW

Farms:

Bruce Brinkman Farms (Valmeyer, IL) - 78.30 kW

Alto Vineyards (Alto Pass, IL) - 33.95 kW

B&J Grain and Feed (Valmeyer, IL) - 24.85 kW

Mulberry Hill Farm (Carbondale, IL) - 14.24 kW

Oberbeck Grain Company (New Douglas, IL) 12.76 kW

Brent Morris Farm (Benton, IL) - 10.5 kW

Matt Dungy Farm (Ewing, IL) - 10.5 kW

Joey Hutchcraft Farm (Ewing, IL) - 10.5 kW

Long Prairie Partnership (Macedonia, IL) - 10.5 kW

Droll Farms (Ina, IL) - 2 x 9.66 kW

Businesses:

E.T. Simonds Construction Co. (Carbondale, IL) 148.95 kW

Wright Building Center (Murphysboro, IL) 103.79 kW & 27.16 kW

Endrizzi Equipment LLC (Vienna, IL) - 50.40 kW

Marion County Savings Bank (4 locations Salem, IL) 50.40 kW, 17.46 kW, 10.67 kW, 10.185 kW

Community Partners Savings (3 locations Pekin & Flora, IL) - 22.31 kW, 22.31 kW, 14.55 kW

Protek Communications (Marion, IL) 33.95 kW & 12.61 kW

Red Dot Construction (Chester, IL) - 33.37 kW

Schulte Industries (Mt Vernon, IL) 32.0 kW & 21.36 kW

Top Electric and Lighting (Salem, IL) - 32.0 kW

Eggemeyer & Associates (Herrin, IL) - 26.19 kW

The Custard Stand (Sesser, IL) - 23.585 kW

Smart Choice Auto Sales (Godfrey, IL) - 22.55 kW

Water Tower 1, LLC (Mt Vernon, IL) - 21.15 kW

AAA Safe Storage (Energy, IL) - 20.01 kW

R & S Automotive Services Inc. (DuQuoin, IL) 19.8 kW

Porter's Pub (Tamaroa, IL) - 18.9 kW

Cottom Group Inc. (Carbondale, IL) - 15.52 kW

Confluence Books (Carbondale, IL) - 12.46 kW

3318 Investments (Belleville, IL) - 11.04 kW

Douglass School Art Place (Murphysboro, IL) 9.62 kW & 2.86 kW

Medical / Funereal:

Paws Here Veterinary Services (Iuka, IL) - 2 x 27 kW

Breese Dental Group (Breese, IL) - 28.71 kW

Newell Funeral Home (Mt Vernon, IL) - 23.28 kW

Hughey Funeral Home (Mt Vernon, IL) - 14.0 kW

The Albany Clinic (Carbondale, IL) - 16.20 kW

Southern Illinois Dermatology (Steeleville, IL) - 14 kW

Alton Med Center (Godfrey, IL) - 9.3 kW

StraightUp Solar - CM

Mississippi Valley Library District, Collinsville

Modules		
Module Make	CS	QCell
Module Model	445	485
Number of Modules	162.0	198.0
System size, kWdc	**72.09**	**96.03**
Total kWdc	**168.12**	

Inverter(s)	
Inverter Make	CPS
Inverter Model	25
Number of Inverters	6
System Size, kWac	**150**
Total kWac	**150**

System Production	
DC/AC Ratio	1.12
Specific Yield (kWh/kWp)	1386
Condition Set	STL
kWh/yr produced	233,111
kWh/yr used	193,520
Offset	120.46%

Self Purchase Analysis		
EPC Amount	$544,000	Includes 15-year Warranty
Interest	$0	0.00%
Total Cost	$544,000	
Net REC	$293,719	
ITC	$163,200	
Energy Community	$0	
Domestic Content	$0	
SIR	$50,436	
Incentive Total	$507,355	
% of Total Cost	15.21%	
Savings over 25 years as a %	83.8%	
Savings over 25 years in $	$508,521	

Year	Energy Prod. kWh	Customer Net Metering rate	Customer Energy value	Customer Per kWh Payment Rate	Customer payments	Customer Savings $	Customer Savings %
1	233,111	$0.0900	$20,980.01	$0.0311	$7,249.76	$13,730.25	65.44%
2	231,946	$0.0915	$21,229.98	$0.0000	$91,044.82	-$69,814.84	-328.85%
3	230,786	$0.0931	$21,482.94	$0.0000	$0.00	$21,482.94	100.00%
4	229,632	$0.0947	$21,738.91	$0.0000	$0.00	$21,738.91	100.00%
5	228,484	$0.0963	$21,997.93	$0.0000	$0.00	$21,997.93	100.00%
6	227,341	$0.0979	$22,260.03	$0.0000	$0.00	$22,260.03	100.00%
7	226,205	$0.0996	$22,525.26	$0.0000	$0.00	$22,525.26	100.00%
8	225,074	$0.1013	$22,793.65	$0.0000	$0.00	$22,793.65	100.00%
9	223,948	$0.1030	$23,065.24	$0.0000	$0.00	$23,065.24	100.00%
10	222,829	$0.1047	$23,340.06	$0.0000	$0.00	$23,340.06	100.00%
11	221,714	$0.1065	$23,618.16	$0.0000	$0.00	$23,618.16	100.00%
12	220,606	$0.1083	$23,899.57	$0.0000	$0.00	$23,899.57	100.00%
13	219,503	$0.1102	$24,184.33	$0.0000	$0.00	$24,184.33	100.00%
14	218,405	$0.1121	$24,472.49	$0.0000	$0.00	$24,472.49	100.00%
15	217,313	$0.1140	$24,764.08	$0.0000	$0.00	$24,764.08	100.00%
16	216,227	$0.1159	$25,059.14	$0.0000	$0.00	$25,059.14	100.00%
17	215,146	$0.1179	$25,357.72	$0.0000	$0.00	$25,357.72	100.00%
18	214,070	$0.1199	$25,659.86	$0.0000	$0.00	$25,659.86	100.00%
19	213,000	$0.1219	$25,965.59	$0.0000	$0.00	$25,965.59	100.00%
20	211,935	$0.1240	$26,274.97	$0.0000	$0.00	$26,274.97	100.00%
21	210,875	$0.1261	$26,588.04	$0.0000	$0.00	$26,588.04	100.00%
22	209,820	$0.1282	$26,904.84	$0.0000	$0.00	$26,904.84	100.00%
23	208,771	$0.1304	$27,225.41	$0.0000	$0.00	$27,225.41	100.00%
24	207,728	$0.1326	$27,549.80	$0.0000	$0.00	$27,549.80	100.00%
25	206,689	$0.1349	$27,878.05	$0.0000	$0.00	$27,878.05	100.00%
					$0.00		
	5,491,156		$606,816.05		$98,294.58	$508,521.46	83.80%

StraightUp Solar - FC

Mississippi Valley Library District, Fairmont City,

Modules	
Module Make	CS
Module Model	445
Number of Modules	122.0
System size, kWdc	**54.29**
Total kWdc	**54.29**

Inverter(s)	
Inverter Make	Solis
Inverter Model	7.6
Number of Inverters	1
System Size, kWac	**7.6**
Total kWac	**47.6**

System Production	
DC/AC Ratio	1.14
Specific Yield (kWh/kWp)	1308
Condition Set	STL
kWh/yr produced	71,061
kWh/yr used	58,325
Offset	121.84%

Self Purchase Analysis		
EPC Amount	$188,000	Includes 15-year Warranty
Interest	$0	10.00%
Total Cost	$188,000	
Net REC	$81,642	
ITC	$56,400	
Energy Community	$0	
Domestic Content	$0	
SIR	$16,287	
Incentive Total	$154,329	
% of Total Cost	17.91%	
Savings over 25 years as a %	80.6%	
Savings over 25 years in $	$149,097	

Year	Energy Prod. kWh	Customer Net Metering rate	Customer Energy value	Customer Per kWh Payment Rate	Customer payments	Customer Savings $	Customer Savings %
1	71,061	$0.0900	$6,395.45	$0.0311	$2,209.98	$4,185.46	65.44%
2	70,705	$0.0915	$6,471.65	$0.0000	$33,671.42	-$27,199.77	-420.29%
3	70,352	$0.0931	$6,548.76	$0.0000	$0.00	$6,548.76	100.00%
4	70,000	$0.0947	$6,626.78	$0.0000	$0.00	$6,626.78	100.00%
5	69,650	$0.0963	$6,705.74	$0.0000	$0.00	$6,705.74	100.00%
6	69,302	$0.0979	$6,785.64	$0.0000	$0.00	$6,785.64	100.00%
7	68,955	$0.0996	$6,866.49	$0.0000	$0.00	$6,866.49	100.00%
8	68,610	$0.1013	$6,948.31	$0.0000	$0.00	$6,948.31	100.00%
9	68,267	$0.1030	$7,031.10	$0.0000	$0.00	$7,031.10	100.00%
10	67,926	$0.1047	$7,114.87	$0.0000	$0.00	$7,114.87	100.00%
11	67,586	$0.1065	$7,199.65	$0.0000	$0.00	$7,199.65	100.00%
12	67,248	$0.1083	$7,285.43	$0.0000	$0.00	$7,285.43	100.00%
13	66,912	$0.1102	$7,372.24	$0.0000	$0.00	$7,372.24	100.00%
14	66,578	$0.1121	$7,460.08	$0.0000	$0.00	$7,460.08	100.00%
15	66,245	$0.1140	$7,548.96	$0.0000	$0.00	$7,548.96	100.00%
16	65,914	$0.1159	$7,638.91	$0.0000	$0.00	$7,638.91	100.00%
17	65,584	$0.1179	$7,729.93	$0.0000	$0.00	$7,729.93	100.00%
18	65,256	$0.1199	$7,822.03	$0.0000	$0.00	$7,822.03	100.00%
19	64,930	$0.1219	$7,915.23	$0.0000	$0.00	$7,915.23	100.00%
20	64,605	$0.1240	$8,009.54	$0.0000	$0.00	$8,009.54	100.00%
21	64,282	$0.1261	$8,104.97	$0.0000	$0.00	$8,104.97	100.00%
22	63,961	$0.1282	$8,201.54	$0.0000	$0.00	$8,201.54	100.00%
23	63,641	$0.1304	$8,299.26	$0.0000	$0.00	$8,299.26	100.00%
24	63,323	$0.1326	$8,398.15	$0.0000	$0.00	$8,398.15	100.00%
25	63,006	$0.1349	$8,498.21	$0.0000	$0.00	$8,498.21	100.00%
					$0.00		
	1,673,898		$184,978.89		$35,881.40	$149,097.49	80.60%