



FLORIDA KEYS
ELECTRIC COOPERATIVE
ASSOCIATION, INC.

Member Owned Since 1940

BOARD OF DIRECTORS

David C. Ritz
District 1, Key Largo • President

Gretchen Holland
District 1, Key Largo • Vice President

Michael H. Puto
District 4, Marathon • Secretary

Frank N. Hawkins, Jr.
District 2, Tavernier • Treasurer

James J. Boilini
District 1, Key Largo

Craig Belcher
District 2, Tavernier

H.B. Barrett
District 3, Islamorada

George D. Hertel
District 3, Islamorada

Karl M. Wagner
District 4, Marathon

HOT LINE NUMBERS
852-2431 (Tavernier)
743-5344 (Marathon)

Members Should Know: *The cheapest watt is the "negawatt" ... which means the best way to save money on your power bill is energy efficiency.*

Unless otherwise noted, "FKEC NEWS" writing, design & photography by:
Nikki Dunn and
Rebecca Callahan
news@fkec.com

Solar Arrays Perform Well in First Six Months

FKEC's solar arrays are now six months old and are performing at or above our initial expectations.

In mid-December 2008 we commissioned our Marathon solar array followed by our smaller Crawl Key array two months later. These two arrays are the first grid connected solar arrays in the Keys and the Marathon array is currently the second largest in the state of Florida.

Solar Array Performance

The up-to-date performance data for the Marathon array is available on our website at www.FKEC.com, but we have published a few key statistics for that array on the right. As of press time, the Marathon array has returned nearly \$10,000 worth of energy, or 78,274 kilowatt hours.

As you can see in the bar chart, April saw the highest monthly production of any full month to date, with 16,418 kWh produced. Cloud cover plays a significant role in reducing production and may have contributed to the slightly lower output in May despite the longer days.

Performance vs. Promise

The promised output of both arrays prior to installation was estimated at 127,000 kilowatt hours per year, or enough to power about 14 average homes. If the second half of the year is as productive as the first, the



Photo by Pete Bacheiler

Marathon array alone should meet or exceed this expectation. When the production of the Crawl Key array is added, the total green energy produced by FKEC in 2009 should easily exceed the 127,000 kWh estimate at current production levels.

Total Contribution

If the output of both arrays is the promised 127,000 kilowatt hours per year, this is still less than 1 percent of the roughly 700 million kilowatt hours FKEC sells annually.

Solar Power Cost & Financing

Assuming a 20-year life for the arrays, each kilowatt hour produced is expected to cost about 30 cents without factoring in any annual maintenance cost. This is about four times more expensive than FKEC's current purchased power cost.

In 2008, FKEC received \$1 million worth of funding from the Internal Revenue Service's Clean Renewable Energy Bond program to install the two solar arrays. The bonds carry a very low interest rate of one percent or less to minimize financing costs.

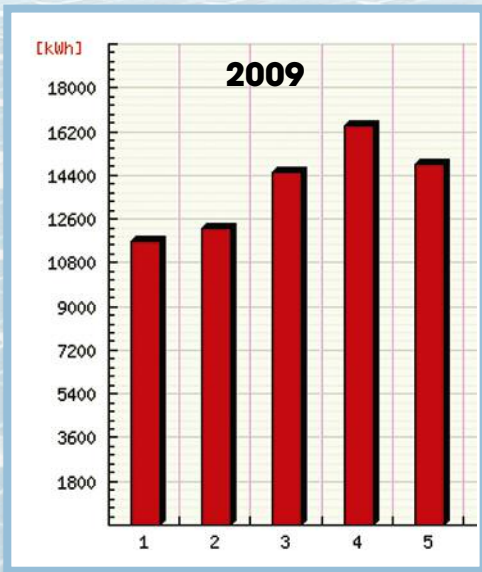
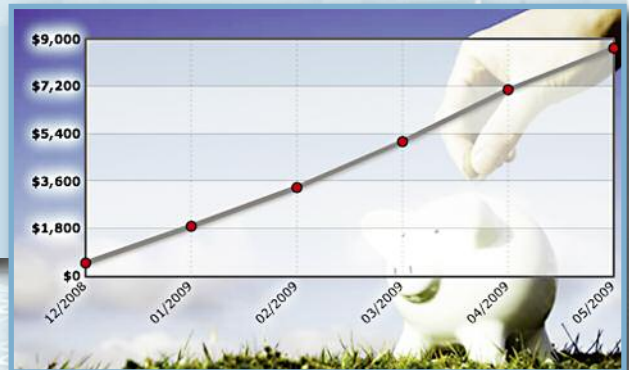
FKEC Marathon Solar Array Performance

Florida Keys Electric Cooperative has been adding "green power" to the local power system since its Marathon solar array went online on December 16, 2008. The Marathon array is the larger of two that FKEC installed at the end of 2008.

The Marathon array is located next to FKEC's Marathon office and its current performance information is available by clicking the "Solar Array Performance Data" link on the Co-op's home page at www.FKEC.com. A summary of the Marathon array's first six months of performance data is included below.

How much money has FKEC's array returned since connection?

The total return of the Marathon PV system from December 16, 2008, through June 11, 2009, is **\$9,392.79**

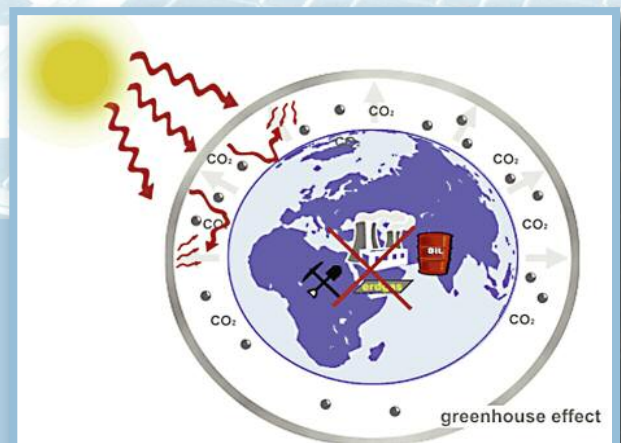


How much energy has been generated?

A total of **78,274 kWh** has been produced by the Marathon array from December 16, 2008, through June 11, 2009.

How has the solar array impacted the environment?

As of press time, FKEC's Marathon solar array has **avoided producing 76 Tons of Carbon Dioxide** which is equivalent to **266 trees** planted.



See these charts and more including daily and hourly Solar Array Performance updates at www.FKEC.com



Co-op Consumers Harness the

Florida Keys Electric Cooperative is proud to have eight interconnected solar homes on its grid to date. All of those homeowners have their own story, but our most recently interconnected “solar family” was willing to share their unique story with us, in their own words:

The Perrotti Family Solar Story

by John Perrotti, Key Largo

My name is John Perrotti. I live in Key Largo with my wife, Gail; my son, John Louis; and my daughter Emily Rose. I am a Firefighter for the City of Coral Gables and my wife is a Teacher for Monroe County Schools at Plantation Key School. We have joined the growing numbers of those who are turning to the sun to provide “earth friendly energy” for the electrical needs of our family.

A little over a year ago I was discussing solar possibilities with several of my co-workers and decided to investigate further. I called FKEC and was directed to T.J Patterson. Mr. Patterson was very helpful and answered many of my questions. He sent me informative emails which contained the names of several solar contractors who had done installations in the Keys, and also pointed out that there were incentive monies available from the State. Additionally, there are tax incentive credits. We asked for quotes from a few of the supplied contractors. A very good friend of ours that had worked with at least two of these contractors directed us in no uncertain terms towards using SALT (Sea Air and Land Technologies) as our solar contractor.

The people from SALT began a whole new educational process for us. There are a great many possible configurations and different types of solar systems. Initially, we were looking at a “Grid Tied System.” This allows the system to produce solar power and if the production exceeds the load requirements of the home, the excess is

stored on the grid. This excess power would just be used by the home later when the sun goes down. You are essentially using the grid as your storage system. This was the less expensive route. I thought that in the event of a power outage, following a storm for example, you could use solar energy to power the home at least in the daytime. With a simple grid tied system this is not the case.

If you want to power your home when the electric utility’s grid is down, you need to have a “Grid Tied Battery Backup System” to be able to use the power producing capabilities of the solar panels. This system is more expensive. Ultimately, this is the system we chose because it seems silly to have all of this technology on your

home and not be able to use it in the event of a power outage.

We had been told from the very beginning that installing solar hot water made the most financial sense of all of the solar applications. The payback period on the investment is much shorter. We always intended to use a solar water heating application. The big question was whether or not we could arrive at a financially workable solar energy array. The people from SALT were very patient and helpful towards that end. They indicated they were interested helping us, not only to have us as customers, but to help show that these types of installations are not only for the very wealthy. They said we would be their first “blue collar” customers.



On the Perrotti family roof (from left): **Steven Grasley**, Solaria (system designer); **Erwin Fischer**; **Chuck Meier**, SALT - Sea Air and Land Technologies (system installer); **David Ritz**, FKEC Board President; **John Louis Perrotti**, Congresswoman **Ileana Ros Lehtinen**; **John Perrotti**; **Darral Smith** (solar plumber extraordinaire); **Gail Perrotti**; and **Emily Rose Perrotti**. Not pictured: **Bob Williams** of SALT.

Sun's Power

After looking at a great many possible configurations, we decided to go with a two-stage approach. We would install a solar hot water system and two thirds of the solar panels we would ultimately have. The solar hot water system required a larger storage tank than the one we had. My wife was unwilling to give up coveted closet space for this larger tank. SALT came up with a solution using a tank designed for coastal exterior installations. SALT uses Steven Grasley of Solaria to design their systems. He designed a custom, hybrid system utilizing the south facing portion of our roof to accommodate not only the rows of panel we planned to install now, but also taking into account the ones that would be installed after we financially recover from "Stage One."

We did have to take a few cold showers as we worked through some of the "nuances" of this custom system of solar hot water heating. I am happy to say that my family endured that time period very gracefully, and SALT was attentive at solving the issues that surfaced. We now have more than enough hot water and it is all heated by the sun.

The solar panels are also producing energy. We are very pleased at the performance we are getting from them. It is very satisfying to know that we are taking steps to act responsibly towards satisfying our energy needs, and doing it in a way that is kind to the earth. We plan to put the final compliment of panels on the roof as soon as we can.

Congresswoman Ileana Ros Lehtinen is a supporter of the Keys and how different projects and programs may affect them. She took an interest in our solar project and recently visited our house to view it.

We became acquainted with Congresswoman Lehtinen a few years ago when my daughter Emily Rose and I were in a movie that was shot for the Florida Keys Eco-Discovery System located in Key West. She is a supporter of the Eco-Discovery Center. My family and I visited her in Washington DC this summer. She and her staff made it a visit we will remember for a long time to come. Ileana took my children and my niece onto the floor of the House. She let my son John Louis cast her vote on the issue they were voting on that day! This made a very positive impression on him. At least for now, he thinks he may like to go to Law School to be better prepared to be a public servant in Congress one day. He has after all, already learned how to vote on the floor of the House!

This is a major simplification of our project from inception to now. It does not cover how very helpful FKEC was in furthering many aspects of this project, from our bringing power to the house underground, to assisting with our interconnection agreement. Being "green" does feel good. Eventually, our investment will pay for itself.

Hopefully, in the near future, there will be more incentive programs and pricing that will make solar solutions more attainable for the masses. If we don't take steps to help save the world for our children and their children, who will?



Cooperative consumer **Mary Ellen Operchal** (middle) recently accepted a refund check from CEO **Scott Newberry** (right) and Member Service Representative **T.J. Patterson** (left) for power generated by her family's home solar array system.

In February 2007, the Operchals connected their home solar system to FKEC's electric grid. Before installing their 4,900-watt solar array their average electric bill was over \$100. Over the past 12 months the home's average electric bill as been negative \$10.32. In 2008, they sold back a net of \$122.10 worth of electricity to FKEC and were presented with a refund check.

The Operchals' system was installed by Nettles Electric. Their rooftop system is a Beacon Power M-5 Plus.

FKEC encourages consumers interested in installing home solar power to do their research. If you are thinking of installing a solar array at your home for energy efficiency, you may first want to consider less expensive ways to make your home energy efficient. For example, replacing old appliances with energy-star appliances and replacing leaky windows and doors can significantly lower your electric bill.

Remember it is easier and more cost efficient to conserve electricity than it is to generate it with a photovoltaic (PV) system.

For more information or for a free home or business energy audit, call Member Service at 305-852-2431.



FKEC Speaks to Students at Local

Key Largo School Career Day

Employees from FKEC recently presented at the Key Largo School Career day. Journeyman Linemen **Andy Baxter** and **Gene Ehrenkafer**, Member Service Representative **Maria Jones**, Utility Forester **Jason Richards**, Environmental Affairs Manager **Sara Hamilton**, Electrical Engineer **Peter Amendola**, and GIS/AUTOCAD technician **Scott Sheffield** all spoke to the middle school students about their particular jobs and skills.

Together these employees gave the students a good idea of the variety of jobs available at the hometown cooperative. They also took the opportunity to talk about the fundamentals of electricity and electric safety.



Electrical Engineer **Peter Amendola** uses a bicycle to show students how much power they can generate when peddling.



Photo by Maria Jones

Left Key Largo School students had the opportunity to try on real linemen gear and learn about the equipment used.

Right Utility Forester Jason Richards spoke to students about his job at FKEC.



Photo by Sara Hamilton



Photo by Maria Jones

Key Largo Middle School students learn about job opportunities at FKEC and also get to see what work as a lineman is like.

FKEC Visit Students at the Academy at Ocean Reef

At the request of the National Marine Sanctuary, FKEC recently visited the Academy at Ocean Reef to talk about electrical power as part of the school's Ocean Guardian program.

Cooperative employees talked to the K-8 grade students about electrical safety and how electricity works. The students watched a video, were given a live electric safety demonstration, tried on linemen gear, and toured a bucket truck and equipment.

The co-op looks forward to returning next year and talking to the students about "green" energy.



FKEC's **Sara Hamilton**, **Barbara Mungovan**, **Andy Baxter**, National Marine Sanctuary Education Specialist **Ivy Kelley**, FKEC's **Gene Ehrenkafer**, **Maria Jones** and the Academy's Librarian and Teacher **Nicky Laak** stand with third through eighth grade students at the Academy at Ocean Reef.

School Career Days

Stanley Switlik Career Day

FKEC also recently participated in the Stanley Switlik School annual career day in Marathon.

For the older elementary students, FKEC's **Tim Caba**, **Russell Heath** and **T.J. Patterson** hosted classroom activities. They provided an electricity safety demonstration and gave away coloring books, stickers, pens and electrical information. They also told the students about all the great career opportunities at the Co-op and concluded by letting them try on real hard hats and safety gloves.

The younger students were treated to an outside demonstration. FKEC crew members **Orville Garvey** and **Alberto Vidal** showed students a bucket truck and **Carlos Lagos** and **Robert Christensen** gave a demonstration of the digger truck. They also explained the dangers of electricity and showed them equipment used by tree crews and linemen.



Thank You Letters from Switlik Students

Dear F I Key Electric company
 Thank you for coming to the school and I learned about the electric. I hop you com' back.
 your friend Paco

Dear F I Key's Electric Company,
 Thank you for coming to our school. I learned to stay away from wires. I also learned that you can get shocked and you can die. Thank you for teaching me that.
 Sincerely,
 Jissett Rodriguez



FKEC's Russell Heath (left) and Tim Caba give Stanley Switlik students a safety demonstration and show the gear used by crew members.

Photos by TJ Patterson



Linemen **Gene Ehrenkauffer** (in bucket) and **Andy Baxter** show students from the Academy the tools and equipment used by linemen when working on power lines.



Students experience how hard it is to pick up a quarter while wearing a lineman's thick rubber gloves.



FKEC Congratulates Ray Rhash on his College Graduation

FKEC congratulates employee Ray Rhash on his recent graduation from Saint Leo University with his B.A. in Accounting. Rhash graduated with honors. Cum Laude, with a 3.73 grade point average.

Rhash is a 22-year FKEC employee and went back to earn his B.A. in 2004 while working fulltime for the company.

"It is very challenging working fulltime and going to school," says Rhash. "Especially since online semesters are 8 weeks instead of 16 weeks."

Rhash went back to school to further his knowledge and

skills in the accounting field so he could better perform his job as Planning, Rate & Budget Analyst and help him meet the daily challenges presented by the power industry. He has also already been accepted to Saint Leo University's MBA program with an accounting specialization and plans to begin coursework in July and then sit for the CPA Exam.

"FKEC very graciously helped me with part of my tuition for my degree in accounting," says Rhash. "And I look forward to applying that

knowledge and growing in my career."

Rhash joined FKEC as an Equipment Operator in 1987, and went on to work as an Apprentice Lineman, Work Leader, Marathon Warehouse Manager, Work Order Specialist, and now in his current position. He also participates in many community groups including the Upper Keys Rotary Club, Leadership Monroe County and has served the City of Marathon's Affordable Housing Task Force, and as First Vice President



FKEC employee **Ray Rhash** recently graduated with a B.A. in accounting and was accepted to an MBA program.

of the Greater Marathon Chamber of Commerce.

He has also been awarded the Florida Keys Electric Cooperative's Illumination Award in recognition of dedication to the cooperative and outstanding community service.

"We are very proud of Ray and what he has accomplished," said CFO Cris Beaty. "FKEC supports all employees who wish to continue their education to better themselves and improve their work performance."

Does FKEC Owe You Money?

Florida Keys Electric Cooperative Association, Inc. hereby notifies the following members or former members that unclaimed membership deposits and other amounts due members or former members in March 2008 have been undeliverable for a period of ten (10) months after payment has been attempted by check mailed to the last address provided by the member to the Cooperative. Such member or former member must claim these payments within thirty days of the date of this publication. Failure to make such claim will result in an irrevocable assignment or gift by such member or former member of membership deposit or other amount to the Cooperative pursuant to Article I, Section 8 of the bylaws of the Cooperative. For further information, the member or former member listed should contact the Refund Department, Florida Keys Electric Cooperative Association, Inc., P.O. Box 377, Tavernier, FL 33070.

Maureen E Judge
103 Las Brisas Cir
Hypoluxo FI 33462

T Mobile c/o Facility Iq-Ms 1365
Po Box 2440
Spokane Wa 99210-2440-40

S Lou Peter
150 Paradise Dr
Welaka FI 32193

Darrick A Parker
178 Marina Ave
Key Largo FI 33037-4302-78

Mundo Inc
c/o Freewheeler Vacation
Po Box 1634
Islamorada FI 33036-1634

Annie Collins
22299 Fletcher Rd
O Brien FI 32071

Michelle Acevedo
345 Sw 122nd Ave
Miami FI 33184

Peerman Holdings Ltd
c/o Rory K Carvill
S. Sparkes/St. Helens #1
Undershaff London Ec3a8jt
England

Time Out Barbecue Inc
c/o Steve Ehlers
1698 Se 18th Ter
Homestead FI 33035

Richard Carosella
505 N Lake Shore Dr
Chicago Il 60611

Adriana Diaz
444 Brickell Ave #443
Miami FI 33131-2403-99

**For Job Opportunities at FKEC
visit www.FKEC.com or call the
Jobs Hotline 877-594-3532**