



**FLORIDA KEYS
ELECTRIC COOPERATIVE
ASSOCIATION, INC.**

Member Owned Since 1940

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It's hurricane season again, so take time now to have your trees trimmed away from power lines to help prevent power blinks and outages.

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Storm Hardened Tavernier Center, Solar Arrays & 99.99% Reliability Topics at Meeting

Florida Keys Electric Cooperative's 68th Annual Meeting & Picnic on April 18 attracted 536 registered members and their families to Coral Shores High School. The meeting was preceded by a free barbecue lunch prepared by FKEC's Eddie Dudley and his crew and a free performance by Humorist Bill Chitwood.

FKEC Board President David Ritz presided over the meeting and Board Treasurer Frank Hawkins presented the Financial Report. CEO Scott Newberry then presented his report on issues facing the co-op today.

CEO'S REPORT

An abridged version of the CEO's Report is included here for members who could not attend. Watch the presentation in its entirety by visiting www.fkec.com and clicking on Video Library.

Florida Keys Electric Cooperative had a successful year in 2008 with the on-time construction of the new storm hardened Tavernier Operations Center, the installation of its first grid-tied solar arrays and the achievement of 99.99% reliability with an average of only 45 minutes out per customer for the year.

Tavernier Operations Center The Taj Mahal?

Despite what many of you may hear around town, FKEC's new Tavernier operations center is not the Taj Mahal. I've heard the term thrown



Photo by Randy Chaney

SCOTT NEWBERRY
Chief Executive Officer

around when people talk about our new building and I'm flattered because I think the Taj Mahal is one of the most beautiful buildings ever built. But the two buildings also share another similar feature in that both were designed and built for a single purpose. The Taj Mahal is a memorial built by Shah Jahan in the 1600s for his third wife who died giving birth to their fourteenth child. It is a very impressive memorial to her.

The Tavernier Operations Center serves a single purpose as well. This building was designed and built to serve you, the members of FKEC.

Replaces Four Structures

The new Tavernier Operations Center replaces four structures in total, including an old metal warehouse that was removed before construction began. FKEC was storing a million dollars worth of material in that warehouse and it was not a storm rated structure. As FKEC's President David Ritz mentioned at our meeting several

Annual Meeting & Picnic 2009

years ago, the concern was that this building would not hold up in a minimal hurricane and the resulting loss of materials would have severely hampered our restoration efforts. So first we tried to see if we could reengineer the old metal warehouse to achieve a hurricane rating. We discovered that it would have been more expensive to strengthen it than to tear it down and start from scratch.

After evaluating the warehouse, FKEC then completed a full facility assessment and determined that for this community to have a truly storm hardened facility, FKEC would need to replace all of the buildings in the Tavernier area including our old administration building on the oceanside as well as our system operations center. So after about seven years of blood, sweat, tears, design and planning we are finally here. All facilities, all features, all functions of Florida Keys Electric

Cooperative are now contained and protected in this one building.

Storm Survivability

When we were planning this building we were all really, really concerned about having a strong, storm-resistant building and as a result we ended up with just that. The central warehouse section is highly reinforced to protect our materials and our fleet of bucket trucks, which can all be safely stored inside the warehouse during a storm.

The entire structure was built to withstand category 4 -5 storm winds and most of the building is rated for more than 250 mph wind loading. It is also significantly elevated with the slab of the warehouse 12 feet above sea level. You may recall the remarkable amount of fill we had delivered in order to keep our operations and materials out of storm waters.

The entire structure is all concrete and steel and was constructed using tilt walls. The concrete walls were formed on site and each one is 8-10 inches thick of steel-reinforced concrete. A crane lifted the walls and set them in place.

What really gives the building its overall strength is that it is built as a continuous envelope. As each wall is set into place it is bolted and welded to the footer and then welded to the walls on either side. So what you end up with is a solid continuous concrete shell with concrete floors and concrete beams completing the interior. It is all tied together with a solid concrete roof as well. This will hold up to about anything Mother Nature can throw at us. And again our main desire was to be able to get the power back on for you as soon as possible.

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Photo by Randy Chaney



Congresswoman Ileana Ros-Lehtinen (third from left) attended this year's annual meeting and was greeted by (from left) FKEC Directors Frank Hawkins, Gretchen Holland, Karl Wagner (back) and Mike Puto, along with FKEC CEO Scott Newberry.

David Ritz
Board President



Photo by Randy Chaney



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Stand-Alone for 72 hours

FKEC also designed this building to operate in stand-alone mode, completely cut off from the world, for at least 72 hours. One of the features that allows us to do this is a 500 kW generator sitting on a 1,700-gallon belly tank. That generator is large enough to run all the electric functions in the building and that belly tank has enough fuel to run that generator for at least three days.

Just as all of you worry about drinking water and hit the stores before a storm, we do too. But instead of buying hundreds of gallon jugs we instead installed a fresh water storage tank that is constantly recirculated. The tank should hold enough drinking water for all 95 Tavernier employees for at least three days.

So we can keep the lights on and have drinking water but we also need to be able to feed our people. The facility includes a full commercial kitchen and adequate food storage and preparation facilities for at least three days. We have a full walk-in freezer, cooler storage, dry goods storage and cooking equipment.

We also included a main assembly area and training room designed to hold all 95 people at one time. On a daily basis it is set up for

employee training and safety meetings but in the event of storm it will be a cafeteria and bunk room.

The board room is also oversized to serve as an extra bunk room for our employees or outside crews to sleep in during storm restoration.

Energy Efficiency

When we planned this new operations center we also wanted to make sure we built an energy efficient building and an environmentally friendly building so we chose to follow LEEDs – Leadership in Energy and Environmental – guidelines.

If you call FKEC and talk to our Member Service reps about saving money on your electric bill, the first thing they will suggest is that you look at your air conditioner. Cooling uses about 50% of your average annual energy consumption. So we followed our own advice and made sure we installed a highly efficient air conditioning system. We chose a chiller that pumps water into seven separate highly efficient air handlers. The chillers are programmable so they keep the building at a comfortable working temperature during working hours but then the temperature is allowed to rise automatically several degrees over night.

On the building's concrete roof we installed a highly reflective white

membrane to reduce heat gain. We also installed a solar hot water heating system so all of the building's hot water is warmed by the sun.

The most striking energy efficient feature of the building is the eyebrow you see around the building in bright red. It serves two energy efficiency functions: first it keeps the top windows in the shade to reduce the cooling load, and second it allows in indirect sunlight to reduce the lighting load.

Speaking of lights, we gave you each a fluorescent light bulb when you registered today to use in your house. Every light in this building is fluorescent. This reduces our need to use electricity for light. We also have all of our lighting programmed to make sure that if an employee leaves his or her office space without turning off the lights, they will automatically shut off around 7 p.m. The building shuts itself down with the exception of emergency lighting and then about 7 a.m. it turns the lights back on.

Green Building Features

In addition to being energy efficient, this building also has environmentally friendly features. The most significant is our 30,000 gallon cistern, which is the largest in the Keys as far as I know. It was the very first thing built for this building.



It now resides below the slab in the warehouse. We collect rainwater off the roof of the entire building because the roof is shaped to channel water into specifically designed and angled drain pipes. We also wanted to collect as much condensation from the air conditioning system as possible. We were surprised to learn that at the height of the dry season there was enough condensation to keep the cistern full. We use the water for vehicle washing and landscape watering when necessary.

We also have six waterless urinals that will save up to 20,000 gallons of water each per year, so we will save up to 120,000 gallons of water and the cost of purchasing it.

I teased the employees that before we moved into the new building we'd have to have potty training classes because we also installed special toilets. The toilets have dual flush settings to save even more water.

An additional LEEDs feature is the use of material mined from the site in the building construction. If you look when you drive by, you'll see our gate and the front of the building clad in keystone. The coral was mined from the site during site drainage work before we ever started construction. The contractor actually cut out all the coral we

Humorist **Bill Chitwood** warmed up the crowd with his entertaining wit and wisdom.

needed removed for free, in return for keeping whatever coral we didn't need. He shipped the big blocks off site to his factory, cut them into the shapes and sizes you see on our building, and hauled the finished pieces back down to us. The only investment we have in that coral is what it cost to have the keystone installed on the building and on the fence columns.

In summary, FKEC had quite a few goals in mind before we started construction on this building. We wanted a strong, functional, energy efficient and very environmentally friendly building. And here we are with it complete today and I think we more than achieved our goals.

Grid-Connected Solar Arrays Complete in 2008

So while the new Operations Center was under construction, FKEC was actually accomplishing a few other things in 2008 as well. At this time last year I mentioned our goal of adding solar generated electricity to our system before the end of 2008. I'm happy to announce we did so with two weeks to spare! In mid-December we commissioned our first solar array in Marathon.

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Photo by Randy Chaney



Photo by Randy Chaney



Photo by Randy Chaney





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And this year, just a couple of months ago, we commissioned a smaller array in our Crawl Key substation. These two arrays are now the first grid connected solar arrays in the Keys. And to this day as far as I can tell, that Marathon array is the second largest in the state of Florida.

Solar Array Overview

The Marathon array is composed of 552 separate 175-watt modules. It has a maximum capacity to generate 96.6 kilowatts of electricity, or about enough to power 10 homes.

What we found when we started researching solar was that we don't have enough available land. The largest sunny area was next to our offices in Marathon and we did squeeze some space out of the Crawl Key substation. We put in a smaller 21 kilowatt array there. There are 120 separate 175-kilowatt modules in that array and its annual output is estimated at 29,000-kilowatt hours or enough for approximately four homes. Overall with these arrays we hope to generate one-quarter of 1% of our overall energy needs so they are very, very small at this point in time.

Solar Array Cost

Solar is expensive. It cost one million dollars for those two arrays. We financed them through a Clean Renewable Energy bond offered by the Internal Revenue Service. The bonds carry a very low interest rate of one percent or less so we should not have very much in the way of financing cost down the road.

Solar Array Performance

If you're interested, we have the solar output performance data for the Marathon array on our website at www.FKEC.com.

Tree Line USA Designation

At this point I also wanted to mention that FKEC received a very significant designation this year. FKEC has been recognized by the Arbor Day Foundation as a Tree Line USA utility. What that means is we practice a program of quality tree care which meets arborist standards. We do our best to trim trees properly so they remain healthy and grow away from our power lines. We also do annual training and stay involved with our community by providing tree planting education. We are one of only 147 utilities out of several thousand that have this recognition.

99.99% Reliability Four Times Better Than Average

Also this year, FKEC's Board of Directors set some stringent goals for the employees of FKEC. One of them was to achieve at or below 1.2 average hours out of service per member for the year. I'm proud to say that we exceeded their goal last year with only 45 minutes average outage time. This is four times better than the national average for co-ops.

This high reliability is achieved through strict line clearing and maintenance and routine equipment testing. We also inspect 3,000 distribution poles each and every year and replace any of those immediately that need to be replaced. New poles must now meet the Extreme Wind Standard, which is a much more stringent construction standard than what was used for the old poles.

Outage Reporting System

We also implemented a new Outage Reporting system in 2008. Basically it is a computer that answers outage calls and uses your phone number to provide a faster idea of the location of the outage and what may

have caused it. The system also gives line crews a better idea of where to look to minimize your outage time.

Thanking Employees

I would finally like to take a minute to thank all 127 FKEC employees. We have some pretty high expectations for them but no matter what I ask of them, they always come through. And I can't think of any higher compliment than that.

We place a lot of emphasis on reliability and I've talked a lot about that today. We take the job of keeping the lights on for you very seriously. But just as important as reliability is keeping everyone safe.

Last year, we invited Mr. Eddie Black to speak at a safety meeting at the suggestion of one of our Journeymen Linemen. Mr. Black lost both of his hands when he came into contact with 17,000 volts of electricity. His life changed forever that day. Eddie went off to work a strapping young lineman and before the day was out he was an invalid. Now not only did his wife Lisa have to care for their young boys but she also had to care for Mr. Black. He couldn't feed, dress or clean himself.

Eddie and Lisa persevered and I'm happy to say they carried on and raised two successful children and enjoyed life together.

So in the unfortunate event that you find the power out at your home or business I ask for your patience. Please note that we will respond to that outage as quickly as possibly to get your lights on as fast as we can, but I will never ask our linemen to sacrifice safety in the interest of speed. I want each and every one of them to go home at night in the same condition if not better than the way they came to work that morning.

Thank you.



**Saturday,
June 13th
2009**

Plenty to do and see for the whole family

Food Booths

Live Music/Entertainment

Jewelry • Art • Crafts

Silent & Live Auction

Childrens Activities

Beer/Wine/Full Bar

Benefits Key Largo School and Plantation Key School after school sports programs

**Rowell's Marina, mm 104.5 Bayside
10am-8pm**

\$3 Admission prepaid • \$5 Admission at the gate
Advanced Ticket sales at KLS, PKS, Sonny's in Florida City,
City Hall Cafe and Sundowners Office



Check Here to See if FKEC Owes 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 August 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.

Bfb Lot 4 Lic	Suite #203, 3540 Forest Hill Blvd, West Palm Beach Fl	Cove South	311 Woodspring Ln, Greenville NC	Jared Metz	c/o Fletc Class #729, 1300 W Richey Ave, Artesia NM
Annie Collin	22299 Fletcher Rd, O Brien	Dc 708 P5 Llc	94500 Overseas Hwy, Key Largo	Niagara Bay Holdings	1031 N Greenway Dr, CoralGables
Cindy Harrison	210b Jerome Ave, Islamorada	D Garrett Const. Inc	35 Ocean Reef Dr #200, Key Largo	James R Pierce Jr	c/oExchange Acct Int, 18285 Sw 264th St, Homestead
Anthony Conselice	Po Box 224, Seaside Park NJ	Frank & Elaine Cunneen	14 Leighton Ct, North Haven CT	Jacquelin Orta	325 Calusa St #403, Key Largo
Louis Satrano	1660 Churchill Downs, Key Largo	Lazaro Duran	102900 Overseas Hwy #201, Key Largo	Scott Price Suite 210,	1450 Madruga Ave, Coral Gables
Adolfo Albaisa	10700 Sw 67th Ave, Miami Fl	Mark Englehart	511 Hilltop View St, Cary NC	Tyler J Reynolds	6805 Overseas Hwy, Marathon
Timothy J Adkins	151 Bayview Ter, Akron OH	Bruce Frerer	20728 W 6th Ave, Summerland Key	Christine Sadowski	10 Clinton St Apt 4l, Brooklyn NY
Jason Anthony	39 Gardner Rd, Vernon Ct	Jeff C Folino	7 Sunset Rd #2, Key Largo Fl	Paul S Skabo	262 Santa Rosa Ave, Sausalito CA
Karen S Anderson	Po Box 862, Islamorada Fl	Terry Ford &Terrence Peck	112 Gibson Rd, Asheville NC	Rich Shirey	325 Calusa St L488, Key Largo
Anglers 113 Llc	c/o Scott G Oropeza,	Peter &Elizabeth Flesor	(L13/B15), PO Box 1800, Key Largo	Linda K Swanson	1627 Seminary St, Key West
Robert J Betancourt	815 Peacock Plaza, Key West	Orlando V Fernandez	8880 Nw 172nd Ter, Hialeah	Guy Tenenbaum	120 S Coco Plum Rd, Key Largo
R E Berger c/o Cindy Berger	140 Sabal Palm Ln, Tavernier	Dawn M Gerow	Po Box 1805, Islamorada	Patricia E Urbano	9300 Sw 98th St, Miami
Jerome J Broz	46 Se 10th Terr, Dania Bch	Robert E Hauta	Po Box 776, Groton CT	Simon Carson	150 Florida Ave, Tavernier
Giovanni Brus	402 N Lakeside Dr, Lake Worth	Grassy Key Aquatic Cnr	3265 Meridian Pkwy #128, Weston	Rolando Velazquez	2 Meridian Ave, Key Largo
Kristine A Burdette	92157 Overseas Hwy #21, Tavernier	Eduardo Gonzalez	1571 Overseas Hwy #5, Marathon	Marquesa Cove Llc	1501 Corporate Dr #150, Boynton Beach
David Contreras	Po Box 299, Fairmont WV	John Mckinney	179 Venetian Way, Islamorada	Doreen Nicholas	Po Box 45-5060, Key West
Charles & Eloise Corley	10900 Sw 97th Ave, Miami	E O & Kathryn E Mcgilvary	19 Jenny Ln, Key Largo	James A Downs	Po Box 500102, Marathon
	312 Windham Hill Rd, Knoxville TN				



FKEC's Barbara Mungovan Celebrates 80th Birthday

FKEC employee Barbara Mungovan recently celebrated her 80th birthday with family and friends. In addition to a birthday party at the Co-op, her family and co-workers also threw her a giant surprise beach bash with over 250 guests.

Mungovan joined FKEC in 1988 as a Utility Person and continues in that position. She joined the Co-op with 11 years experience as one of the first women to be hired at Eastern Airlines Aircraft Overhaul Maintenance Department.

Mungovan is actively involved in the Women of the Moose and has been honored as that group's Woman of the Year. She is also past Senior Regent and is very involved in St. Justin Martyr Catholic Church. She is well known locally for writing and publishing timely poetry for special occasions. She has been writing poetry since she was a child and has written for family, friends, co-workers and her community.

Barbara's six surviving children all traveled to the Keys to surprise her: Cathy (Mims, FL) with husband Jim; Laurie (Central FL) with Bean's great-granddaughter Ashton; Kelly (Austin, TX) with husband Hartt; Nancy (Virginia) with her son Matt; Danny (Wisconsin) with wife Rosanna; and Tim (Miami) with girlfriend Angie and her two daughters.



FKEC employees celebrated with their co-worker Barbara Mungovan on her 80th birthday.



Mungovan (center) is surprised with co-workers, family and friends watching as her children perform a skit at her 80th birthday party.



Mungovan's six surviving children all traveled to the Keys to surprise her. From left: Tim, Laurie, Nancy, Danny, Cathy and Kelly honored their mother with a performance to an Irish song she would sing to them as children. Barbara was surprised when they removed their disguises!



Chris Pankow Marks 15 Years

FKEC congratulates Chris Pankow on his 15-year employment anniversary. Pankow joined the Cooperative as a part-time mapping technician. After mastering what he described as a "perpendicular learning curve" in the area of power generation he earned the position of supervisor of the Marathon Generation Facility.

Pankow is an active member of the Marathon community and has received numerous honors for his community service, including Rotarian of the Year.

Chris and his wife Denise (who is also an active member of the community) also enjoy restoring vehicles together, especially their prize winning 1962 Corvette. Chris also has a grown son, Christian, who lives an interesting and adventurous life studying sharks.