

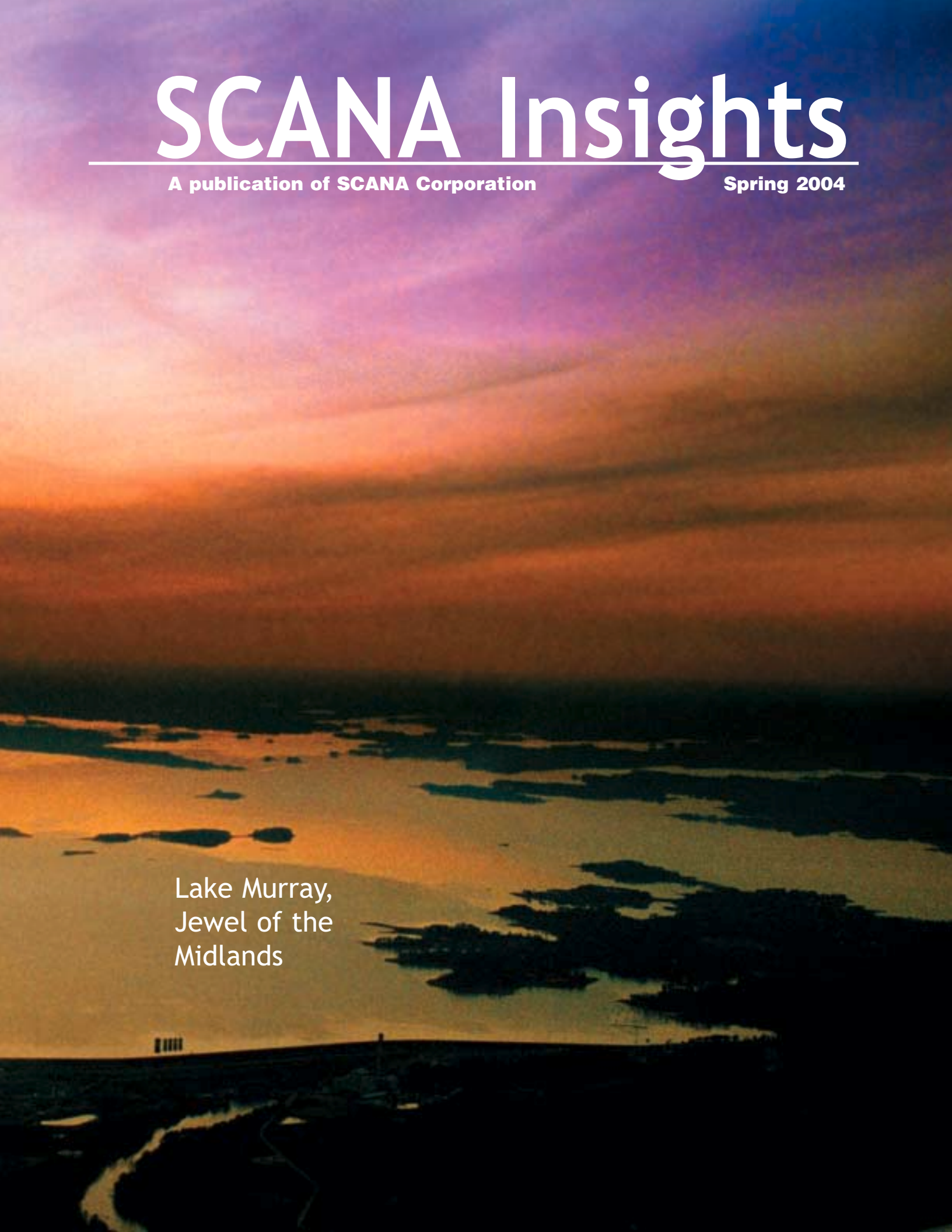
# SCANA Insights

---

A publication of SCANA Corporation

Spring 2004

Lake Murray,  
Jewel of the  
Midlands

An aerial photograph of Lake Murray at sunset. The sky is a mix of purple, orange, and blue. The water is dark with patches of lighter, golden-brown reflections from the setting sun. The surrounding land is dark and silhouetted against the bright sky.

# FROM THE CHAIRMAN

Dear Customers and Friends:

The first four months of 2004 have been an exciting time for our company as we achieve the completion of several major capital projects.

Our new natural gas-fired Jasper Generating Station will be added officially to our electric system in May. It will bring an additional 875 megawatts and increase SCE&G's electric output by 20 percent. This \$450 million investment in additional generation will help ensure reliability now and in the future.

The plant's source of gas is an interesting project in itself. Liquefied natural gas from offshore is being delivered to facilities at Elba Island, Ga. These facilities regasify the LNG, which then is piped directly to the Jasper Generating Station through a pipeline we own and operate. Gas not used by the new plant is available to support our other gas customers.

New technology has greatly enhanced the ability to transport the gas, in liquefied form, bringing an important new source of gas to our region.

While we are completing our

Jasper project in the Lowcountry, you are probably aware of construction of our new backup dam at Lake Murray. This unique and challenging project is the largest dam construction underway in the country and one of the largest in the world.

We won't generate any extra kilowatts from the \$275 million investment, but we will have ensured the integrity of the dam, protecting both the 150,000 residents downstream and the incredibly valuable recreational resource that is Lake Murray.

By early summer, we should reach a point in the construction that we can ask the Federal Energy Regulatory Agency to allow us to begin letting the water level rise. Keep in mind, however, that the amount of rainfall will determine the actual time required for the lake to return to normal levels.

We're wrapping up another major project as we install more than 7,000 feet of electric transmission cable 40 feet beneath the riverbed of the Cooper River in Charleston.

The existing cable was installed on the old Grace Memorial Bridge, but that approach was not feasible with the replacement bridge. This type of installation, using a horizontal directional drill, causes minimal impact on the sensitive environment surrounding the historic river.

We're featuring these important projects in this issue of *Insights* to keep you, our



W.B. TIMMERMAN

valued customers, informed about their progress.

These projects support and enhance our commitment to provide our customers with locally produced electricity.

A handwritten signature in black ink that reads "Bill". The signature is written in a cursive, flowing style.

# T A B L E O F C O N T E N T S



## **Business basics mean Baja success** 2

Small business owners are excited about the features of SCANA's new Small Business Resource Center



## **The new generation** 6

SCE&G's newest and largest generating plant uses clean burning, natural gas fired technology



## **The Heart Walk** 12

SCE&G employees took top honors again for most money raised to fight heart disease in the Midlands and the state



## **The great wall of Lake Murray** 14

SCE&G engineers found a unique way to save costs by using fly ash in the concrete mix for the new dam

## **Everyday heroes** 20

SCANA joins the American Red Cross in recognizing the extraordinary acts of individuals in the Lowcountry

## **More than one way to cross a river** 22

The replacement for the transmission line on Charleston's Grace Memorial Bridge is 40 feet under the riverbed

## **NewsScan** 26

- ◆ Hardeeville approves first natural gas franchise
- ◆ SCE&G extends natural gas pipeline to Santee
- ◆ SCANA Energy acquires Energy America's customers
- ◆ PSNC Energy employees "run for the money"
- ◆ New SCANA Web site provides resource for learning



*Cover: In addition to providing water to generate electricity, the 50,000-acre Lake Murray is considered the Jewel of the Midlands.*

PHOTO BY JEFF AMBERG

Spring 2004  
Volume 16, Number 4

Editor:  
*Mary Green Brown*

Marketing Communications  
and Public Affairs  
Director  
*Cathy Love*

Senior Vice President of  
Marketing and  
Communications  
*Sharon Jenkins*

SCANA *Insights* is produced quarterly by the SCANA Public Affairs Dept. SCANA Corp. is a \$8.4 billion energy-based holding company with subsidiaries providing electric, natural gas and telecommunications services. Call 803-217-8833 if you have any comments, questions or ideas for articles or e-mail [mgbrown@scana.com](mailto:mgbrown@scana.com).

SCANA *Insights* can be viewed on the SCANA Home Page at [www.scana.com](http://www.scana.com)

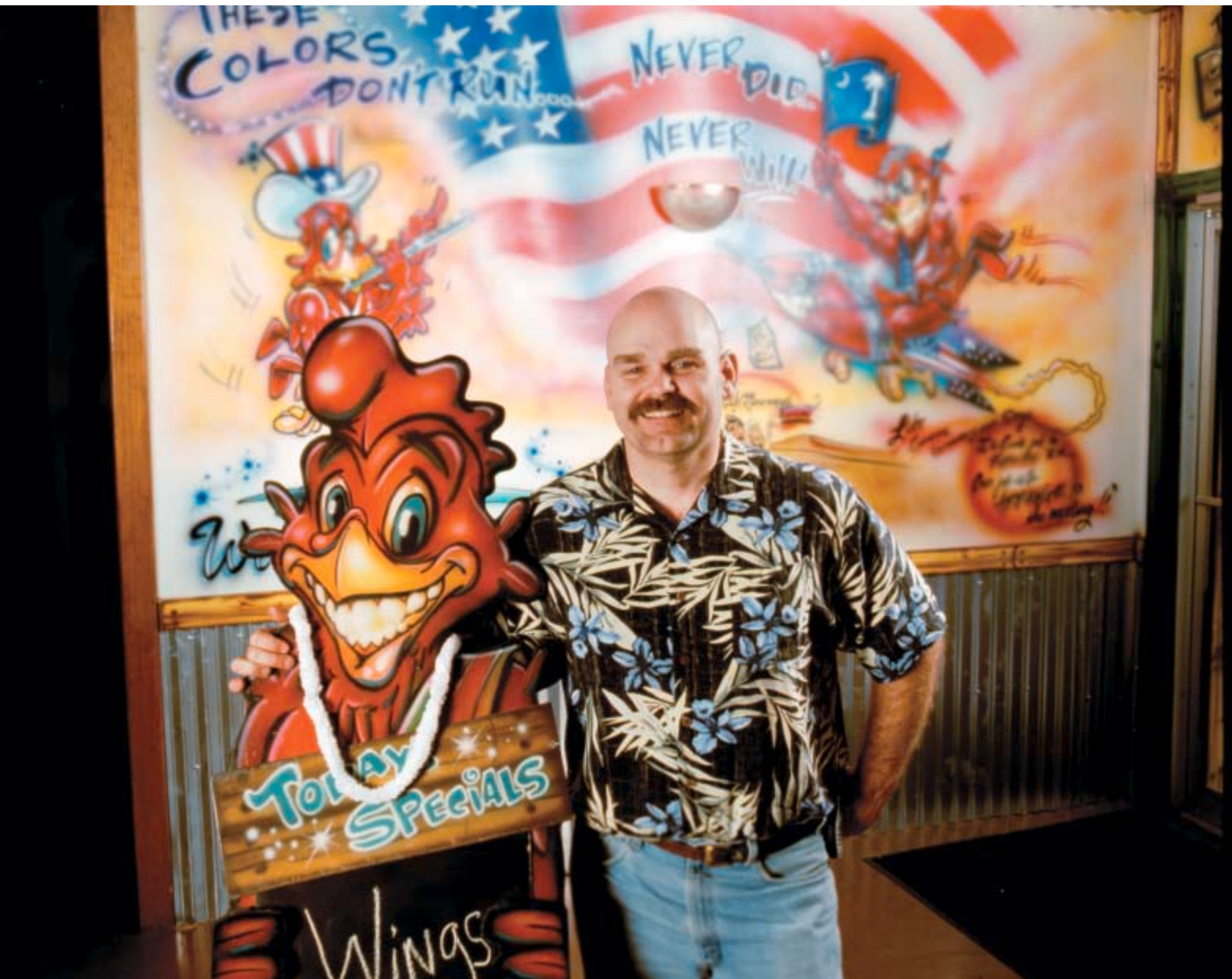
Mail Code 063  
SCANA Corp.  
Columbia, SC 29218



© 2004 SCANA Corporation.  
All rights reserved.

*Printed on recycled paper*





## Business basics mean **BAJA** success

Jeff Butler and his wife, Amy, grew tired of working for others and dealing with the economics of Southern California. With a family to raise and the high cost of living on the West Coast, they began looking for places to move and open their own business. After a vacation visit to his father's Lake Murray retirement home, they researched area schools and real estate prices. Then they made the decision to move to South Carolina and start a business of their own.

Armed with a master's degree in economics, Butler was nonetheless in for a rude awakening on the road to entrepreneurship.



"We went to the SBA (Small Business Administration) for a loan, and they wanted a business plan. Same thing with the banks. That was the toughest part of starting the business. Putting a business plan together in a precise and concise manner and getting the loan approved."

The Butlers' Baja Broiler restaurant in Lexington is doing well after a little less than a year in operation. But Butler says getting started would have been a lot easier if he had had access to SCE&G's new Small Business Resource Center (SBRC).

"Developing a comprehensive business plan to sell to investors is not an easy

task when you are starting your own business. The SBRC section on business planning provides everything you need to know and include," Butler said.

SCE&G and North Carolina SCANA subsidiary PSNC Energy launched the SBRC on Feb. 1. In the first three weeks, more than 1,200 customers visited the site. "That's a pretty good response," said Barry Timmerman, SCE&G's marketing manager.

Shortly after the launch, David Mottel, residential and commercial sales manager for SCE&G's Aiken Division, encouraged Michelle Orr, director of membership services for the Greater North Augusta

Chamber of Commerce, to check out the site.

"I looked at the Web site the day you and I talked," she wrote in an e-mail. "It is great... such informative information. Looking forward to hearing more about it at our next breakfast meeting."

The SBRC Web site offers more than 6,000 pages to assist small businesses with information on everything from human resources to marketing, the latest business news, reference libraries and more.

In addition to the SBRC, business and commercial customers also now have 24-hour access to their account information. Businesses can

The screenshot shows a web browser window displaying the SCE&G Small Business Resource Center. The page has a red header with the SCE&G logo and navigation links. A left sidebar contains a 'SMALL BUSINESS RESOURCE CENTER HOME' menu with various service links. The main content area features a title 'Small Business Resource Center', a welcome message, and a list of topic links: 'Special Offers', 'Your Business A to Z', 'How To' Guides, 'Business News and Trends', 'Business Communities', and 'Manage Your Account'. A featured article by Steve Strauss is highlighted. The footer includes logos for Peachtree, FIRST DATA, Alamo, and PR Newswire, along with technical information and a privacy statement.

review account listings, payment information, consumption detail, rate detail and other information by signing in at [www.sceg.com](http://www.sceg.com) or [www.sbrc.psnenergy.com](http://www.sbrc.psnenergy.com)

Another new service SCE&G is offering is a customer service line designated specifically for businesses and commercial customers. If businesses or commercial customers have questions about their accounts, they can call 1-866-543-7234 during normal business hours.

"Small businesses make up a significant portion of our business. In fact, we have more than 90,000 small business customers on the SCE&G and PSNC Energy systems," Timmerman said.

"With a number that large, it's impossible to provide each business with an assigned account representative, like we do with our large customers. But we believe the combination of things we're doing should help small businesses manage their accounts better and provide them with information that can assist them in their day-to-day operations."

Melissa Barton, for one, is glad. Armed with a business degree, the owner of A Charleston Bride said getting started was "almost overwhelming" when she went into business three years ago.

"When you're actually in the workplace and have to do it all on your own, you don't always know where to turn," the wedding planner said. "You definitely need resources, and the site tells you where to go to get them."

Barton said she never thought of SCE&G as being a resource she could turn to. She finds the site easy to navigate, which is important because

"small business owners are already working a lot of hours and don't have time to sift through a 10-page report. This site is very useful for someone like myself who is at the point of applying for a business loan and expanding my business."

Jeff Butler agrees.

"We got through it (starting the business), but it was like pulling teeth," Butler said. "The business planning aspect of the SBRC Web site was the first

thing that jumped out at me. That was the most dramatic part of getting this business going. I just wish I had known before, but I'll definitely use the site going forward."

BY BRIAN DUNCAN  
PHOTOS BY ROBERT CLARK

*Melissa Barton, owner of A Charleston Bride, is excited about using SCE&G's Small Business Resource Center to build her business.*







## The new GENERATION

SCE&G's Jasper generating plant represents the latest in clean burning gas-fired technology

*Reliably serving customers.*

It sounds so simple really. We all expect the lights to come on when we walk into our homes and flip on the switch. It's something we probably take for granted. But as the Northeast blackout of 2003 showed us, nothing is guaranteed.

That's why SCE&G is proud that it is officially adding the new Jasper Generating Station to its system in May.

*More than 22 miles of pipe were used in the construction of the new Jasper Generating Station.*

The construction of the 875-megawatt facility reinforces the company's belief that the most reliable way to operate its system is by owning its own generation, meaning that SCE&G owns and operates enough power plants to produce enough electricity to successfully serve its customers.

The Jasper project is the culmination of years of planning, almost two years of construction and the tireless efforts of many people. The new plant is the largest on SCE&G's system and will help the company meet the energy needs of its customers well into the next decade.

The addition of the Jasper plant, one of 22 generating sites on SCE&G's system, increases the company's electric output by more than 20 percent to approximately 5,800 megawatts. To put that in perspective, one

megawatt of power is enough electricity to power approximately 330 homes at peak.

"It's definitely a significant addition to our system," said Steve Palmer, plant manager at Jasper. "Since one-third of V.C. Summer's [SCE&G's nuclear plant] generation is owned by Santee Cooper, Jasper is now the largest plant on our system."

The planning, construction and completion of the Jasper Generating Station is a real success story for SCE&G and SCANA. The project represents a true integration of SCANA's electric and natural gas businesses.

### **Finding a plant site**

Steve Cunningham, who managed the development of the Jasper plant, remembers when he was given the

responsibility for finding a site for the plant. He said several locations were looked at, including existing SCE&G facilities Urquhart, Cope and Canadys.

"The primary considerations for siting a gas-fueled, combined cycle plant are fuel supply, access to the transmission system, water availability and environmental suitability.

"During the time that I was looking at possible sites for the plant, Southern Natural LNG (liquefied natural gas) announced plans to reactivate the Elba Island (Georgia) liquefied natural gas facility. That's when SCANA's pipeline business considered the merits of an interstate pipeline that would bring natural gas from the Elba Island facility into the lower part of South Carolina."

It didn't take long for SCANA to act, creating SCG Pipeline as a new subsidiary in the spring of 2002.

This new company was given the task of building an 18.2-mile interstate pipeline to bring gas from Elba Island to the plant location. The pipeline was completed last fall.

Cunningham said that with a fuel source available, he was able to quickly focus his siting efforts on the Hardeeville area near the Savannah River, where SCE&G and Santee Cooper had existing transmission lines. Several tracts of land were considered before one was ultimately chosen.

Cunningham said the site selected has the unique advantage of being adjacent to the Beaufort-Jasper Water &

## **Facts about the new Jasper Generating Station**

In full operation, the plant burns 6.6 million cubic feet of natural gas an hour. To put that in perspective, the cities of Columbia and Charleston each burn approximately 4 million cubic feet of natural gas per hour on a cold winter day.

The plant contains 117,233 linear feet of pipe, including 75,729 above ground and 41,504 below ground. Since there are 5,280 feet in one mile, there was more than 22 miles of pipe used in the construction of the facility.

More than 22,000 cubic yards of concrete were used in constructing the plant. That's enough concrete to build a sidewalk adjacent to I-26 between Columbia and Orangeburg.

The Jasper Generating Station is capable of producing enough electricity to serve more than 280,000 homes.





Sewer Authority canal and new water treatment facility.

“It couldn’t have worked out any better for us,” said Cunningham, a 30-year employee of SCE&G.

“There are only four LNG terminals in the country, and one of those is the Elba Island facility. Then, as we began looking at land options, we discovered that the Beaufort-Jasper Water & Sewer Authority was planning to build a new facility on one of the very sites we were considering for our plant. Once we were able to work through the logistics with them, everything began falling into place quickly.”

The new \$450 million Jasper Generating Station is situated on approximately 45 acres of a 350-acre site, and the water and sewer facility sits less than a quarter of a mile away.

## A state-of-the-art facility

SCE&G’s new plant features state-of-the-art technology, including three combustion turbine generators, three heat recovery and steam generators and one steam turbine generator.

The Jasper facility was built by Charlotte-based Duke Fluor-Daniel, which worked on two earlier projects for SCE&G – the Cope Station construction and the Urquhart Station re-powering.

“The efficiency of the gas combustion system makes it environmentally friendly,” said Ronnie Stroble, superintendent of operations at the plant, whose father was a former assistant plant manager at Canadys Station. “In fact, because of the advanced technology used in the system, an automobile using the same amount of fuel puts out more pollution than this plant.”

Cunningham, Palmer and Stroble agree that the project went as well as any they’ve ever worked on. They say proper planning, good engineering and quality people are the reasons for the success.

“There were so many different areas – both internally and externally – that touched this project in some way,” Palmer explained.

“While we had the construction going on at the plant, SCG was building the gas line from Elba. And at the same time we had the transmission group working to build the new line to Yemassee. It has just been an unbelievable effort by so many people.”

One person Palmer mentions specifically is Skip Smith, who served as project director during construction.

“A lot of resources and expertise contributed to this project moving along so quickly,” Palmer said. “But Skip Smith is the man who brought it all together and provided the leadership necessary to get it to the finish line. He and his team managed the details and kept us moving ahead.”

The project moved along so well that the plant fired its turbines for the first time this past November. Then, on two cold days in February and March, the plant made a significant contribution to meeting customer demand when it placed power on the grid while other SCE&G generating facilities were down for maintenance.

“We were fortunate to be in a position to contribute,” Palmer said.

Cunningham said another key to the project moving along smoothly was the cooperation of the community.

“Like any project of this magnitude, there were a few concerns voiced in the early going, primarily about noise and traffic around the plant,” he said.

“But we were able to address those concerns and make some assurances. Overall, I would say that the community has been accepting of the project and most of them see it as a great opportunity for the area.”

## An asset to the community

Rose Dobson, deputy administrator for economic development and planning for Jasper County, falls into that group. Despite being located along the I-95 corridor and near

### Major milestones

Purchased combustion turbines	June 2000
Site selected	March 2001
Announced proposed facility	April 2001
Submitted air permit application	August 2001
Received PSC siting certificate	January 2002
Site clearing started	April 2002
Received air permit	May 2002
Started construction	May 2002
Combustion turbine delivered	January 2003
Steam turbine delivered	February 2003
Energized substation	September 2003
Gas pipeline completed	October 2003
First fire combustion turbines	November 2003
<b>Began commercial operation</b>	<b>May 2004</b>



the port city of Savannah, Ga., Jasper County, with a population of more than 20,000, has always been one of the more economically depressed counties in the state. Dobson believes SCE&G's decision to locate its plant in Jasper County is another step in turning that around.

"It's certainly an asset to the community, and I believe it's a catalyst for lot of things to come to Jasper County," she said. "SCE&G's presence here should make other businesses and

industries stand up and take notice.

"They will help us attract new development and strengthen our tax base. We'll be able to improve our overall services; our schools, our emergency services and our law enforcement. We'll begin to play a more prominent role in this region of the state, and SCE&G will have played a significant part in that."

As Jasper County welcomes its new addition, the generating plant stands ready to serve as a

good neighbor, a tax base and supplier of reliable energy for years to come.

BY ROBIN MONTGOMERY  
PHOTOS BY ROBERT CLARK

*Rogers Brown, a control room operator at the Jasper Generating Station, checks plant systems.*







They were not hard to spot in the March 27 Midlands Heart Walk in Columbia, S.C. Approximately 750 SCE&G employees and family members wore rust-colored company T-shirts as they walked to raise money to fight heart disease.

Once again, they exceeded their fundraising goal with more than \$96,000 collected. That made SCE&G the top fundraising company in the Midlands and in South Carolina.

Employees and their teams used a wide variety of fundraising tactics and events, in addition to collecting pledges for the walk. They held a car wash and hot dog lunch, a barbecue cookoff, bake sales, book sales and other activities over the course of a couple of months.

This year's T-shirts list all the company-sponsored walks in the Midlands on the back. Employees are already working on the next big event, the March of Dimes WalkAmerica, at several locations in South Carolina and North Carolina.



*Hundreds of employees and family members donned rust-colored shirts to walk or run in the annual event. At right, SCE&G President Neville Lorick helps a young SCE&G team member with a blinking, heart-shaped pin.*

# The Heart Walk

SCE&G employees take it over the top









# The great wall of Lake Murray

SCE&G engineers faced a major quandary in the early stages of designing the backup dam at Lake Murray. They saw the potential for reducing the cost of the dam's 2,300-foot mid-section of roller compacted concrete by using fly ash as part of the mix. But there was a hitch.

For years, SCE&G has sold the majority of the leftover ash from its coal plants to the commercial concrete industry for use in building schools, roads and bridges.



*Above, Ray Ammarell, a senior engineer with SCE&G, has played a major role in construction of the new backup dam. At left, a construction worker cleans rock in an excavated area behind the existing dam.*



A truck hauls ash that will be used to produce roller-compacted concrete.



It's a program that reduces the amount of ash that would have to be landfilled as waste, and it results in big savings for SCE&G customers while providing a definite benefit to the environment.

But diverting the nearly 100,000 tons of ash needed for the backup dam would have hurt SCE&G's ability to serve its commercial market, not to mention opening the possibility for other suppliers to fill the void.

Ted Frady, who oversees SCE&G's Coal Ash Utilization program, said the situation was a bit complicated.

"We're talking about two different things here: Dry fly  
(Continued on page 18)

## When will the water come back up?

Early this summer, SCE&G expects to be in a position to ask the Federal Energy Regulatory Commission (FERC) to lift the restriction on water levels and allow Lake Murray to begin rising.

FERC ordered the drawdown in the early stages of construction of a new backup dam in the interest of public safety and for SCE&G to maintain the lower water levels until all excavations behind the existing dam were returned to normal ground levels. The excavations were needed to build a solid foundation for the new dam.

As part of that process, SCE&G was required to develop a formal refilling plan that established criteria for performance data in relation to safety, communications with the public, environmental protection and the return to normal operations for the Saluda hydroelectric plant.

"SCE&G developed the refilling plan for Lake Murray to address the continued safety of the existing Saluda Dam and the people living and working downstream. Other factors included the concerns of Lake Murray users and property owners and downstream Saluda River environmental and water concerns for a variety of commercial and industrial users," said Mike Summer, general manager of technical services for SCE&G fossil/hydro operations. "The plan was also developed to balance these concerns with SCE&G's obligation to serve our customers as required by the S.C. Public Service Commission."

When SCE&G is given the green light to proceed with the refilling plan, SCE&G will coordinate attempts to hold the water levels at a certain point for two weeks to allow marina operators to reposition their docks to their original locations and for the S.C. Department of Natural Resources to move hazard buoys into their former locations.

"This project remains focused on the safety of the downstream public, so refilling Lake Murray will not begin until SCE&G, our independent Board of Consultants and FERC are in agreement that Saluda Dam is in a safe state to begin refilling Lake Murray," Summer said.

He cautioned, however, that realistically the water in Lake Murray will not reach levels typical of the summer months until the summer of 2005.

"In normal operating years, we bring the water up to its highest level with spring rains, and then generate electricity as needed across the summer. While we will balance the need for generation with concerns over water levels, what we usually find in the summer is that in extremely hot weather, we can lose more water through evaporation than enters the lake from upstream inflows."

The Lake Murray Dam remediation project has been several years in the making, but once it is complete, it will ensure that Lake Murray remains the "Jewel of the Midlands" for many years to come.



photo by Jackson Photography



*Decorative panels, which will be attached to the upstream base of the new dam facing traffic, are produced on site.*

*(Continued from page 17)* ash that is captured before it leaves the stack that we sell commercially, and wet ash from settling ponds in landfills like the ones associated with the McMeekin generating plant at the lake. If, in fact, we had used McMeekin's dry fly ash, it

would have hurt other aspects of our ash marketing program," Frady said.

"The solution worked out at the dam allows us to use two different products in ways that maximize the benefit to our customers and the environment."

The "solution" came when the engineers began to explore the possibility of using the existing, on-site ash landfilled from McMeekin's more than 40 years of operation.

Ray Ammarell, a senior engineer who plays a critical role with the backup dam

project, said using the previously landfilled ash represented an innovative use of the material, but one that required extensive testing and numerous concrete mix designs to prove it would provide a high quality product.

"There were other

considerations associated with this part of the backup dam project that had to be worked through, but we did work through them and now are progressing well with the overall construction work," Ammarell said.

As a result of finding an

innovative answer in the face of doubt, SCE&G's engineering efforts earned the 2003 Southeastern Electric Exchange's Industry Excellence Award.

BY BRIAN DUNCAN  
PHOTOS BY ROBERT CLARK





# Everyday heroes

*Betty Norman dove off a dock to save a teenager who was drowning in the river. Before the dive she instructed her daughter and a friend to get help from a local fire station. She is now campaigning with her daughter's Girl Scout troop and the regional Girl Scout organization for legislation to place lifesaving buoys at all public boat ramps and landings. A speech pathologist with a home health agency, Norman also saved a child who was choking at a local mall last year.*

**Fire Chief Franklin Burke** of St. Paul's Fire Department saved the life of a 5-year-old boy after conducting a room-by-room search in a burning house.

Fifteen-year-old **Nicholas Meifert** used his Boy Scout training to treat a shooting victim until help arrived. Witnessing a shooting at a local fast food restaurant, he raced to the scene, had someone call 911 and provided first aid.

Each was honored as a Neighborhood Hero, along with 17 others, in a special event organized by the American Red Cross, Carolina Lowcountry Chapter, and sponsored by SCANA Corp.

Individuals are nominated by local citizens, with the criteria of having "saved or sustained the life or lives of others, risked their life in an attempt to save someone, or performed an extraordinary

personal action to benefit others." The act must have taken place between January 2002 and Dec. 31, 2003.

This was the third year of the Neighborhood Heroes recognition and SCANA's second year as sponsor.

Twenty were named Neighborhood Heroes for 2004 and received medals at an awards event March 4.

Burke, fire chief of St. Paul's Fire Department, was awarded a medal in the Professional Rescuer category. Norman was honored in the Good Samaritan - Adult category while Meifert was recognized for Good Samaritan - Youth.

Additional medal recipients recognized included the following:

#### **Professional Rescuer**

**Detective Harry Long** of the



Charleston County Sheriff's Office talked a suicidal father out of killing his baby on the Cooper River Bridge.

**Sergeant Anthony Acobe** of the Charleston County Sheriff's Office saved the life of a teenager who spent nearly 15 minutes underwater in a pond in McClellanville.

#### **Good Samaritan - Adults**

**Mr. and Mrs. Hector Williams, James Allen and Alonzo Pinckney** entered a burning house several times to rescue the homeowner and her pet.

**Raymond Scott** saved the life of a 6-year-old child who ran from school grounds into heavy traffic.

#### **Good Samaritan - Youth**

**Clay Moyer** performed an abdominal thrust to save the life of his choking uncle.

**Kevin Murray** devoted his time and energy to making responsible decisions and caring for his siblings during the time of his mother's pregnancy and illness.

#### **Random Acts of Kindness**

**Annie Baker**, at the age of 87, continues to epitomize what it means to be a good, caring neighbor.

**June Griggs** has been a community volunteer for more than 40 years. She led other volunteers as they updated the first aid kits for the Charleston Air Force Base warehouse.

**James Smith** aided local neighbors with blood sugar testing and drove them to and from doctor's appointments.

#### **Military**

**Capt. James Hooper** donated his time and energy and recruited others in the 16th Airlift Squadron to lend a hand for Habitat for Humanity projects around the area.

#### **Senior Airman Keri A.**

**Coronel**, a loadmaster for the C-17A Globemaster Aircraft, has flown several sorties in support of Operation Iraqi Freedom.

**Sgts. Mark Henriquez, Mitchell Peters and Norman Hurley** witnessed a car accident and stopped to help. They provided first aid to the driver and passenger until EMS arrived.

"Every day we have citizens in our communities saving lives or engaging in other extraordinary service to others. We are proud to be a part of this recognition of these individuals," said Jo Ann Butler, manager of SCANA corporate affairs.

*Each year, The American Red Cross, Carolina Lowcountry Chapter, seeks nominations for heroes. The nominee must reside or be employed in Berkeley, Charleston or Dorchester counties.*

*The chapter is accepting nominations for the 2005 awards event through Feb. 11. The heroic acts must have taken place between Jan. 1, 2003 and Dec. 31, 2004. Nominations can be submitted online at [www.LowcountryRedCross.org](http://www.LowcountryRedCross.org). Nomination forms are also distributed in the community prior to the event.*

BY MARY GREEN BROWN  
PHOTO BY ROBERT CLARK





*photo by John Smoak*



# More than one way to cross a river

When the new bridge over the Cooper River in Charleston is completed in the summer of 2005, it won't be the only marvel of engineering crossing the river. Over the river, the new bridge spans 1,546 feet and reaches 575 feet high in the air. Forty feet under the riverbed, SCE&G's electric transmission cable is being directionally drilled for a U.S. record distance of more than 7,000 feet.

According to Jerry Ruschkofski, project engineer for SCE&G, the \$7 million cable being installed under the Cooper River is replacing an existing electric transmission line attached to the old Grace Memorial Bridge, which will be dismantled in 2005.

This line was de-energized in 2003 to accommodate new bridge construction. With an electric demand growth of 40 percent in East Cooper over the past five years, replacing the line before the anticipated electric demand peak this summer is critical to SCE&G's continued reliable service to the area.

"We had already been working to add transmission lines to support current and future load growth east of the Cooper even before this line

was taken out of service," said Ruschkofski. "Now, replacing that line before the summer is a top priority so that we can ensure reliability for those customers.

"It's not typical for us to put a transmission line underground, but in this case, the bridge construction schedule made it necessary in order to have the line in service within our required timeframe," he added. "Additionally, the extreme height of an overhead line and engineering requirements for attaching a line to the new bridge made underground an option worth pursuing."

This cable project is unique

because of its distance – at more than 7,000 feet, it's one of the longest horizontal directional drills in the world, said Steven Kramer, vice president of Jacobs Engineering, the Virginia-based firm chosen to engineer, purchase, construct and manage the project.

While Jacobs has had an ongoing relationship with SCE&G through Jacobs' Greenville office, Kramer says this is the first civil engineering project the companies have worked on together. "We're fortunate to be able to work with SCE&G to build this critical line to serve the East Cooper area."

According to Kramer, horizontal directional drilling is a technology that originated from oil field drilling in the 1970s, and it was not used for large-scale applications until the 1980s. "We're now able to manage this technology and use it in ways we never dreamed of before," he said. "Years ago, we thought it would be fantastic if we could just drill a mile. Now we're drilling longer distances under rivers and other critical structures for utilities across the country."

Kramer says the geological formation of the Cooper River is desirable for this type of drilling. "The Cooper marl is a nice, consistent, homogeneous material that's attractive for drilling," he explained.

*A new bridge being built across the Cooper River in Charleston is shown, at left, beside the old Grace Memorial Bridge. SCE&G is installing a 7,000-foot electric transmission cable 40 feet below the riverbed to replace the transmission line attached to the old bridge.*







In addition, an advantage of directional drilling is that it leaves the surrounding environment practically undisturbed, from an ecological and aesthetic perspective.

The process of installing the transmission cable is a complicated operation that uses heavy, rugged drilling equipment that also requires surprisingly delicate precision and finesse.

The drilling, steered by a down-hole navigation system and Tru-Tracker™ technology, angled down to 40 feet below the riverbed from SCE&G's Charlotte Street substation to Patriots Point in Mount Pleasant. This step of the process was completed in March in about seven days. Then steel pipe, which will encase the electric cable, is pulled back through from Mount Pleasant to Charleston.

"Pulling back the pipe was one of several critical points in the project," explained Jim Sells, Jacobs project manager. "It takes about 24 to 30 hours. Because we couldn't lay the 7,000 feet of pipe straight out on the ground, we had to stop to weld it together every 2,000 feet. The challenge was to keep it sliding steadily to avoid any prolonged stops."

Upon the successful completion of the drilling, the steel pipe, eight inches in diameter, was immediately pulled back through from Mount Pleasant to Charleston. Next, the electric cable, encased by the pipe, was scheduled to be pulled through in late April.

On both sides of the river, trenches were being prepared to house the cable from the entry and exit points to the electric substations. Preparation work began in Mount Pleasant in the fall of 2003. SCE&G field

engineer John McAnany has been on-site daily from the beginning, coordinating the activity and working with Sells on logistics and planning.

"Aside from some unforeseen material delivery delays and occasional inclement weather, progress has been very good," said McAnany. "At this point, we expect to complete the project on time by late May 2004."

"This is obviously an important groundbreaking project for our company," said Bill Turner, SCE&G's general manager of power delivery.

"We take our responsibility to meet the energy needs of our customers very seriously."

BY CHRISTY FARRELL

*Sections of pipe approximately 40 feet in length, on opposite page, were screwed together to form the initial pipeline that was pushed and drilled under the Cooper River.*



*At left, pipe is loaded onto the traveler on the horizontal directional drilling machine to be pushed into the ground.*

photos by Robert Clark



## Hardeeville approves its first natural gas franchise

SCE&G received approval March 4 to provide natural gas to the City of Hardeeville when the city council adopted the city's first-ever natural gas franchise. SCE&G will extend natural gas lines along U.S. 278 to the Coastal Carolina Medical Center near Exit 8 on I-95.

"We've been working on this gas franchise for months, and this is going to be a great opportunity to help Hardeeville

with more economic development, both commercial and residential," Mayor Rodney Cannon said. "This is one of the keys to Hardeeville's bright future."

Marty Phalen, SCE&G's vice president of gas operations, said, "We are pleased to have reached this important agreement with the city of Hardeeville. We are looking forward to bringing natural gas to this city, and we are excited about the opportunity to help the city benefit from residential, commercial and industrial growth."

Additionally, Hardeeville

City Council adopted an updated electric franchise with SCE&G, which contained only minor changes. Both the electric and gas franchise agreements with SCE&G will last 20 years.

## SCE&G extends natural gas pipeline to Santee

SCE&G has completed construction of a 17-mile, six-inch steel high-pressure natural gas pipeline from Holly Hill, S.C. to serve the Town of Santee, S.C.

The second phase of this two-phase project, which is currently being completed, is the construction of the gas distribution system inside the town.

"This pipeline will bring natural gas to a number of businesses in the area and will serve as an economic development catalyst for the local community," said SCE&G Vice President of Gas Operations Marty Phalen.

SCE&G is working with 13 existing businesses for the initial round of the commercial equipment conversions from

propane to natural gas. Three certified conversion contractors will be performing the actual conversions, while SCE&G staff is coordinating the entire process with the new commercial customers.

The timing of the conversions is critical. To ensure minimum disruption of customers' businesses, some of the conversions will occur between midnight and 6 a.m.

The first round will include several large hotels, restaurants and an assisted living facility. SCE&G is also working on the conversion process with approximately 15 additional businesses.

"Mayor Silas Seabrooks, town administrator Donnie Hilliard, the Santee Business Association and two prominent

realty companies have been extremely helpful in providing business contacts and development information to ensure a successful entry into this new market.

"The business community has welcomed SCE&G and natural gas warmly because they see the benefit of having natural gas in attracting growth and business development opportunities to the Town of Santee," said David Jansen, SCE&G's Charleston division manager of gas operations.



---

## SCANA Energy acquires Energy America's customers

SCANA Energy, an Atlanta-based subsidiary of SCANA Corporation, has completed the acquisition of approximately 50,000 retail natural gas customers formerly served by Energy America in Georgia's deregulated natural gas market.

"We welcome the addition of former Energy America customers to SCANA Energy and look forward to providing them with the same excellent customer service, variety of competitive pricing plans, and billing options that our current customers are able to enjoy," said George Devlin, vice president and general manager of SCANA Energy. The acquisition was completed March 1.

The company also announced that the Georgia Public Service Commission has voted to retain SCANA Energy as the state's sole regulated natural gas provider, extending the two-year term of SCANA Energy's Regulated Division for at least another year, through August 2005.

Added Devlin, "We are grateful to the Georgia Public Service Commission for allowing SCANA Energy's Regulated Division to continue serving the state's low-income and credit-challenged natural gas consumers. Our regulated unit has been experiencing increased growth since its inception in August 2002, and we remain committed to

providing natural gas service to these customers."

SCANA Energy currently has in excess of 450,000 customers throughout Georgia, including more than 52,000 low-income and high credit risk customers served by the company's regulated division.

---

## PSNC Energy employees "run for the money<sup>2</sup>"

Eighty non-profit organizations in the Gaston County area of North Carolina benefitted when PSNC Energy employees helped make this year's "Run for the Money<sup>2</sup>" an overwhelming success.

Sponsored by The Community Foundation, the March 27 annual community-wide effort raised funds for a variety of non-profit agencies in the Gaston County area.

While some PSNC Energy employees participated as runners and walkers collecting pledge money, others handed out water and worked as spotters along the racecourse

and at the finish line.

Employees were easy to spot in their green PSNC Energy T-shirts.

PSNC Energy President and Chief Operating Officer Jerry Richardson participated in race day events, including the awards ceremony. "PSNC Energy employees live the company's values every day," Richardson said. "This is just one of many ways we serve our communities, and I'm pleased to see so many PSNC Energy employees volunteering their time to help local non-profits."

As a major "Run for the Money<sup>2</sup>" sponsor, PSNC Energy's contribution helped sustain the Community Foundation's \$250,000

commitment to match a portion of the funds raised.

The second annual event attracted hundreds of people and generated donations in excess of \$662,000 – almost double what it took in last year.

These proceeds combined with the matching funds from The Community Foundation, will benefit nearly 80 non-profit organizations, including the local Boys and Girls Clubs, Hospice, the Literacy Council, Special Olympics, Habitat for Humanity and United Way.



## New SCANA Web site provides resource for learning

SCANA's interactive educational and community-oriented Web site, [www.EnergeticMinds.com](http://www.EnergeticMinds.com), launched just in time to provide a unique summertime resource for teachers, parents and students.

The site provides educational content and community "go and do" activities that will benefit educators and families throughout the summer as they search for productive and interesting activities to do in North Carolina, South Carolina and Georgia.

As a major corporation in the Southeast, SCANA leaders believe the company has an obligation to support the educational needs of the community. When customers were asked about SCANA's community support, education was a top priority.

This site seeks to establish an online community where teachers can share information with each other and parents can access resources that could make a big difference in the education of their children.

Additionally, recent feedback from teachers suggested that preparation time and parental

involvement are some of their biggest challenges.

*EnergeticMinds.com* provides the perfect platform to help meet those needs. A unique function offered by the site is an interactive exchange called The Trading Post, where teachers can post requests for classroom supplies for interested businesses and individuals to provide.

As teachers prepare this summer for the upcoming



school year, they can visit *EnergeticMinds.com* to find lesson plan and activity exchanges where they can see what other teachers have done in the classroom. Teachers can also contribute their own lesson plans and activities to the site.

The new site addresses the fact that learning does not stop during the summer break. Students can find science project ideas, study tools and energy-related content for their educational needs. Parents can find techniques for getting involved in their children's education as well as summertime safety checklists.

As families plan their fun for the summer, they may browse *EnergeticMinds.com* to find a diverse collection of interesting activities going on in the community. They will find direct links to popular destinations, such as EdVenture and Riverbanks Zoo in South

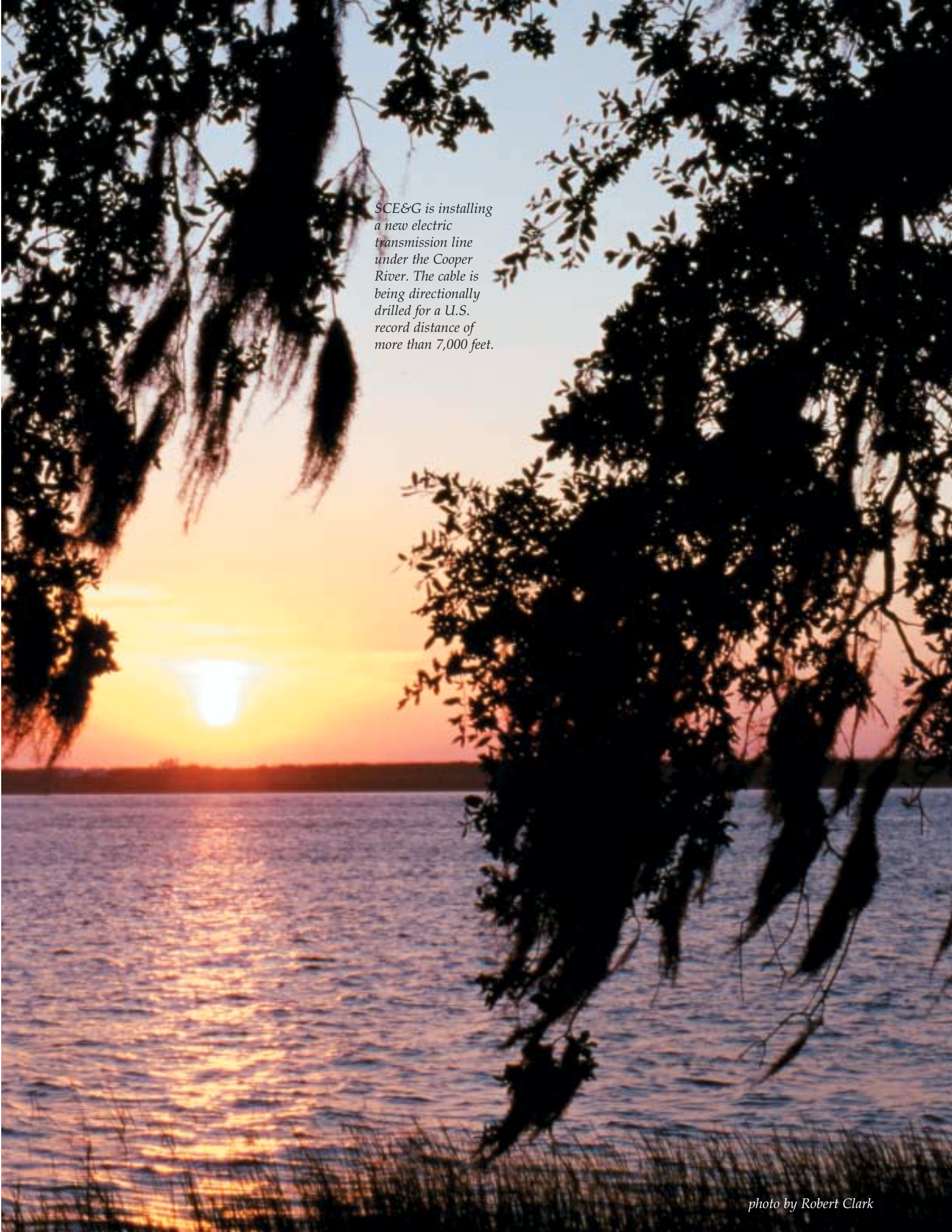
Carolina and the Museum of Life and Science in North Carolina. The site also contains in-depth information on the history of Lake Murray and how visitors may take advantage of all that it has to offer.

Visitors can explore how SCANA and its family of companies contribute to the communities they serve. The community content provides visitors with information on events such as SCANA Energy's sponsorship of the Share Our Strength's Taste of the Nation in Georgia and programs such as the SCANA Homework

Centers, which SCANA sponsors in North Carolina, South Carolina and Georgia.

Look for *EnergeticMinds.com* to continue to add relevant content to meet both your summertime and year-round needs. Visit the site regularly to receive timely information that can supplement your child's educational needs and your family's community interests.

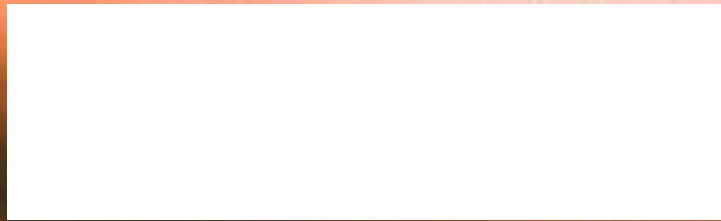


A scenic sunset over a body of water, framed by silhouetted trees and Spanish moss hanging from the branches. The sun is low on the horizon, casting a warm orange glow across the sky and reflecting on the water's surface. The foreground is dominated by dark, intricate silhouettes of tree branches and Spanish moss, which hangs in long, drooping strands. The water in the middle ground is calm, with gentle ripples catching the light from the setting sun. The overall mood is peaceful and serene.

*SCE&G is installing  
a new electric  
transmission line  
under the Cooper  
River. The cable is  
being directionally  
drilled for a U.S.  
record distance of  
more than 7,000 feet.*



PRESORT STD  
US POSTAGE  
PAID  
COLUMBIA, SC  
PERMIT NO. 74



[www.scana.com](http://www.scana.com)