

Questions? Contact us at 803.952.9584.

Welcome to the October edition of the "SRNS News."

October 2010 provided some exciting successes for our company.

This week we announced another important component in our pursuit to gain energy security with an agreement between Savannah River Nuclear Solutions and GE-Hitachi. This is the second initiative we've announced to bring small modular reactor technology to SRS.

The GE Hitachi's PRISM reactor is a 299-megawatt power block that builds on U.S. sodium cooled reactor research and development. I invite you to read more about our research agreement and learn about Dr. Tom Sanders, immediate past president of the American Nuclear Society, who is joining the staff of SRNL to lead the energy initiatives.

Recently, we were privileged to have DOE's Assistant Secretary for Environmental Management Inés Triay on site to celebrate the closure of M Area, once a major industrial area at SRS. Its closure was accelerated by two years under the American Recovery & Reinvestment Act. You can read about it on Page 5.

In this edition, we're highlighting the generosity of the SRNS employees as our company achieved our United Way goal and 12 local agencies were designated to receive employee contributions. You'll also learn how 40 SRNS employees volunteered their labor to roof the Aiken Red Cross Building, allowing for funding to be directed where it's most needed.

Other news this month includes a \$50,000 donation to Aiken Technical College, the demolition of the P and R Reactor stacks, and the annual 25-Year Banquets. What a month!

I hope you enjoy this edition of the SRNS News.



A message from  
Garry Flowers  
SRNS President and CEO



**EXCEEDING OUR GOAL!**

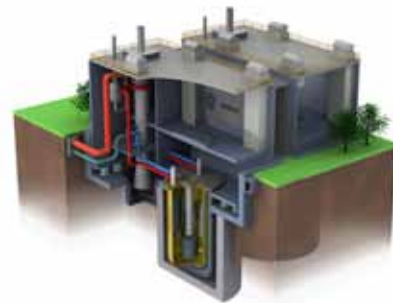
SRNS parent companies Fluor, Northrop Grumman and Honeywell joined in the giving during the SRS Employee United Way Campaign. Please see Page 3 for the full story.

# SRNS news

SAVANNAH RIVER NUCLEAR SOLUTIONS

## SRNS, GE Hitachi sign agreement on small modular reactor

GE Hitachi Nuclear Energy (GEH) and SRNS have announced the signing of a Memorandum of Understanding (MOU) to explore the potential of deploying a prototype of GEH's Generation IV PRISM reactor as part of a proposed demonstration of small modular reactor technologies at SRS. The MOU sets the stage for continued discussions on the potential NRC licensing of a 299-megawatt PRISM reactor.



"This is another step that can put SRS and the region in an important role toward transforming America's energy future," said Garry Flowers, SRNS President and CEO. "We are very pleased to collaborate with GEH to determine the suitability of deploying a prototype Generation IV PRISM reactor at SRS. We believe that SRS is an ideal place to demonstrate the PRISM reactor design as it, and other next generation, small modular reactors are being considered for the future."

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## Sanders to lead energy initiatives

Dr. Thomas L. Sanders, immediate past president of the American Nuclear Society, has joined the staff of the Savannah River National Laboratory (SRNL) to lead the development and implementation of energy initiatives at the Savannah River Site (SRS).

SRNL Director Dr. Terry Michalske said that in addition to coordination of SRS facilities and resources for the energy initiatives, Dr. Sanders' role will include development of private sector partnerships and



Dr. Thomas Sanders

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## SRNS, GE Hitachi agreement

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"Successful deployment of this reactor technology could help the United States be a leader in advanced, small modular reactor technologies and assist in achieving an important goal of the Obama administration for U.S. energy independence," Flowers said.

The PRISM reactor design, which completed U.S. Nuclear Regulatory Commission pre-application reviews in 1994, is an advanced, Generation IV reactor technology that builds on U.S. research and development of sodium cooled reactors. A key attribute of PRISM technology is that it generates additional electricity from recycling used nuclear fuel.

"Working with SRNS towards the possibility of implementing our Generation IV PRISM reactor design is a major step" said Caroline Reda, GEH President and CEO. "We look forward to continuing discussions with SRNS on advanced modular reactor technologies."

SRNL director Dr. Terry Michalske will provide executive direction for SRNS activities along with Dr. Tom Sanders, SRNL's newest Associate Laboratory Director. "This is a natural fit with the mission at Savannah River Site and the expertise that exists in the National Lab," Michalske said. "I think there are many reasons to be excited and optimistic about the potential application of small, modular reactors for the region and the world, and I look forward to seeing these discussions mature."



*Chris Monetta, a Senior Vice President with GE Hitachi, speaks at the SRNS press conference.*

## Jantzen honored with Orth Award

Dr. Carol Jantzen of SRNL has been selected as the 2010 recipient of the Don Orth Award of Merit. Established in 1992, this award is presented by SRNL to an individual who by character, technical performance and leadership best exemplifies Donald Orth's character and contributions.



*Dr. Carol Jantzen*

Dr. Jantzen is recognized within SRNL, SRS, DOE, and internationally for her expertise in high level waste vitrification, the transformation of waste into a stable glass form for disposal. She is credited with over 250 publications and holds 11 patents for her innovations.

## Ceramic engineers honor Wicks

Dr. George Wicks of SRNL is the 2010 winner of the Arthur Frederick Greaves-Walker Award from the American Ceramic Society's (ACerS) National Institute of Ceramic Engineers. The award is named for a founding member and the first president of National Institute of Ceramic Engineers (NICE), which is part of ACerS. The award was presented Oct. 18 at the 112<sup>th</sup> ACerS Annual Meeting in Houston, Texas.



*Dr. George Wicks*

Dr. Wicks is recognized for many years of service in the scientific advancement of ceramics and glass technology, including the conversion of high-level radioactive waste to a glass form. He is credited with 14 patents and more than 200 external publications.

## Sanders to lead energy initiatives

► **Continued from Page 1**

direction of SRNL-based science and technology support for the development of small nuclear reactors and other energy concepts. "Tom brings to us a wealth of experience in drawing together the most capable parties to form collaborations to help move this nation toward our energy goals," Dr. Michalske said.

In his leadership role with the 11,000-member American Nuclear Society, Dr. Sanders initiated and led three special President Committees of 60 U.S. experts to develop issue resolution strategies on issues

related to the nation's nuclear energy future. These included American nuclear industry engagement and national security benefits; U.S. waste options and advice to the President's Blue Ribbon Commission; and recommendations for resolving 18 generic regulatory issues impeding the certification of Small Modular Reactors.

Dr. Sanders comes to SRNL from Sandia National Laboratories, where he most recently was manager and project lead for Sandia's Small Modular Reactor Initiative, including development of key industrial partnerships, evaluation of reactor designs, and development of fuel cycle safety and security approaches.

## Exceeding the United Way goal

*Decades of service, millions of dollars donated by SRS employees*

Once again, SRS workers exceeded the United Way goal by giving more than \$2 million to the 2010 SRS Employee United Way Campaign. The tradition of giving began 53 years ago, and SRS has collected over \$55 million in donations since that time. For the second consecutive year, the 2010 SRS Employee United Way Campaign is a joint effort between SRNS and SRR.

According to SRNS President and CEO Garry Flowers, due to the recession, area United Way agencies are feeling financially "sandwiched;" annual donations from most organizations are down, while the demand for charitable services is continually rising.

"However, when this Site has the opportunity to volunteer, we step up every time. Whether it's giving of time, money, or blood (at the blood drives), SRS employees are there. We are put on this earth for a purpose and that is to help others. I have been all over the world, and I haven't witnessed this type of giving anywhere else. It's remarkable what you do," said Flowers.

Flowers then presented Lori Kostelnik, SRS United Way Campaign Chairperson, a check for \$200,000 in matching funds from the SRNS parent companies, which include Fluor, Northrop Grumman and Honeywell. Flowers said, "This is money well invested."

The first SRS campaign took place in 1952 while SRS was still under construction. That year \$6,991 hard earned dollars were contributed to help those in need, many of which included displaced residents who formerly lived within the 300 square miles then known as the Savannah River Plant.

Along with generosity, creativity is associated with the Site's United Way campaign. In addition to the primary campaign, donations are collected from ice cream, pizza and barbecue fund-raisers, golf chipping contests, softball and golf tournaments, just to name a few.

Twelve local agencies are designated to receive employee contributions. They are the United Way agencies of Colleton County, Screven County, McDuffie County, Hampton County, Allendale County, Edisto, Midlands, Bamberg County, Edgefield County, Barnwell County, CSRA and Aiken County.



On behalf of the United Way, Lori Kostelnik accepts a check from Garry Flowers for \$200,000 in matching funds from the SRNS parent companies.



Heritage Academy Fireside Ministries, a United Way sponsored program, performs for the crowd (below) at the SRS United Way victory celebration.







SRNS President and CEO Garry Flowers and Aiken Technical College President Dr. Susan A. Winsor

## SRNS supports local nuclear education programs

SRNS recently donated \$50,000 to help develop the nuclear education programs at Aiken Technical College (ATC). "This donation is an educational investment in our company," said SRNS President and CEO Garry Flowers. "ATC is where our future is happening." Currently ATC's radiation protection program is one of the largest in the country. According to ATC President Dr. Susan A. Winsor, "This gift will help ATC train workers in radiation protection and for other nuclear industry jobs. The nuclear industry is expected to add 10,000 jobs over the next 10 years."

## Red Cross roof benefits from SRNS volunteer efforts

The air is hot as you pause for a moment to look around, noting the shingles lying near and the hustle of other workers climbing ladders and carrying tools. You close your eyes and feel the vibrations of the pounding hammers and hear the chatter of workers, like the birds singing overhead. Narrowing in on the sounds of the outside world and smelling the wood dust and dirt filling the air, you're reminded of why you're doing this; reminded that shelter is one of the most important factors of our daily lives and our workplaces.

Forty SRNS employees experienced this recently as they volunteered their labor to roof Aiken's Red Cross building. This event was done through Project Vision, a United Way effort.

The volunteers worked all day, until finally running out of shingles. Their motivation and enthusiasm kept the work at a fast pace, so only a few had to return to finish the next day. Lindsay Findley, the new Red Cross director, said, "We are extremely thrilled with what they've done. It's an incredible amount of work in a short amount of time."

"This project provided the unique experience of working with a very large group in a coordinated fashion and seeing the end result all in one day," said Geof Fountain, an SRNS volunteer and first time roofer.

"Plus, the view from the rooftop was pretty good," he said.



SRNS volunteers work to re-roof Aiken's Red Cross building.

"The roof was a great need," said Findley. "There are a lot of important needs we have where we put money forward – any sort of disaster and aid to military families. But we also have maintenance issues. We need our building running properly to work on a day-to-day basis in a safe environment."



## Celebration marks the closure of M Area

Although it might seem odd to celebrate the absence of buildings, for DOE, contractor and regulatory representatives and the SRS employees who completed the project two years ahead of schedule, the completion of the M Area closure deserved nothing less.

"M Area cleanup marks a significant step toward meeting our environmental commitments at SRS, and toward reducing the operating footprint associated with the Site's past mission," said Dr. Inés Triay, DOE's Assistant Secretary for Environmental Management, who spoke at the event. This area cleanup was the first at SRS to be completed with the help of American Recovery and Reinvestment Act funding.

The cleanup effort, taking place over eight years, included the demolition of 23 buildings, as well as the remediation of a network of underground industrial piping and sewer lines, soil areas and groundwater plumes that were contaminated from past spills and operations.

"This is a significant accomplishment, both in cleanup and in teamwork," said Garry Flowers, SRNS President and CEO. "From beginning to end, this has been a good example of the working relationship between the people at SRS and the regulators at both the state and federal level. It's also good to know that this Recovery Act program work was done with no safety incidents. That alone is reason to celebrate, and it's a real credit to the people of the project team."



*Dr. Inés Triay congratulated SRNS on the success of the M Area milestone.*



## P, R Reactor stacks demolished in ARRA efforts

With less than 40 pounds of dynamite and in a matter of seconds, two remnants of the Cold War were history.

On Saturday, Oct. 23, two exhaust stacks from the SRS P and R reactors were demolished. The 145-foot tall, 700-ton stacks have towered over the P and R Reactors for more than 50 years. The demolition, managed by SRNS, is part of an American Recovery and Reinvestment Act project that is decommissioning the two reactors.

“Both P and R reactors served the country well during their 30 years of operation to support the Nation’s nuclear stockpile,” said Zack Smith, DOE Recovery Act program director. “Using Recovery Act funds, we are now able to permanently decommission these Cold War relics.” This \$185 million Recovery Act demolition project is part of in situ, or in-place, decommissioning of the two reactors.

The project employed 108 people to complete the stack demolition. The rubble from the stacks will be placed below grade and grouted in place at each of the reactors. “Stack reduction of these two relic reactors brings us closer to fulfilling the Recovery Act program of reducing the SRS operational footprint by 75 percent by 2012,” said Dennis Carr, SRNS Vice President of the Recovery Act portfolio. “The stack blasting is a good example of teamwork and the safe and fitting completion of an important part of SRS history.”

In preparation for the demolition, SRNS modified the base of each stack to create “columns” into which they drilled 80 15-inch-deep horizontal holes for explosive loading. The explosive charge was initiated by nonelectric detonators ranging in time from 25-200 milliseconds to assist in controlling the rate and direction of the fall of each stack. Seismographs were used in the immediate area to monitor the vibration and air blast generated by the demolition.

The P Reactor stack fell first, followed by the R Reactor stack.

The demolitions were performed by Controlled Demolition, Inc. (CDI), the contractor that also felled the 52-million-pound, 450-foot-high and 345-foot-wide K Cooling Tower in May. In the ongoing phase of in situ decommissioning, the reactors’ underground structures will be filled with an estimated 260,000 cubic yards of concrete grout. This will seal the structures and leave them safely intact for an estimated 1,400 years.



## 25-year banquets honor SRS employees

SRS retirees and employees who have worked at least 25 years at SRS look forward each year to the annual SRS 25-Year Banquets, held this year October 4-6 at the Augusta Marriott. Nearly 2,000 attended over the three-night period.

Guest speaker SRNS President and CEO Garry Flowers said, "This dinner is a great way for you to catch up with your friends and coworkers and hear a bit about the state of the Site, which I am pleased to report on from Savannah River Nuclear Solutions' perspective. When I consider the state of our company and the progress we have made in the past year, I'm very pleased with where we are," said Flowers.

Banquet attendees were treated to hors d'oeuvres and dinner. Afterward, a slide show was presented and various managers from the Site gave updates on SRS operations to the crowd.



Some of the employees who made the 25-year banquets possible included (top row, from left) David Simpson, Mike Cutshall, Sterling Robertson, Chuck Goergen, Steve Willingham, Kirk Pitts, Bill Martin, Ted Pennington; (middle row, from left) Lori Boyd, Mike Rucker, Frank Givens, Teresa Haas, Jennifer Garvin, Donna Fowler; and (bottom row, from left) Laura Wright, June Grigsby, Kent Gilbreath, Sophia Bessinger, Charlotte Holly, Will Davis.



Vi and Frank Martin



Nametags renew acquaintances



Dale, Glenn and Jimmy Piercy



Dan Boone and Clemon Williams



Maxine Williams and Liz Coleman



Ethel Robinson and Robbie Roberson