

March 2012

SAVANNAH RIVER NUCLEAR SOLUTIONS

# SRNS Today



## Juilliard goes to Allendale

**p 6** Ensemble drums up some percussion awareness in SRNS-sponsored performance

**GEN4** ENERGY **SMR**

**NUSCALE** POWER™

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A step closer to reality  
for small modular reactors

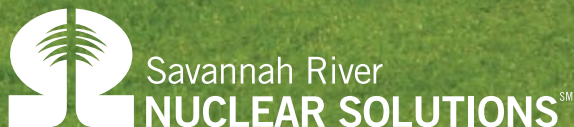


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Volunteers 'live united'  
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Japanese delegation pays  
a visit to Savannah River  
National Laboratory



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**Dwayne Wilson**  
SRNS President and CEO



Welcome to the March 2012 edition of “SRNS Today.”

March is a month of new beginnings and transformations. It's the start of spring, when the world shakes off “what was,” and looks ahead to “what may be.”

At SRNS this month, we took a big step toward “what may be” in the area of small modular reactors. As you can see on the next page, we've signed agreements with three separate companies to support potential private sector development of this technology. The agreements move us along the path to fulfilling the Enterprise•SRS strategic vision, and it's sure to be an exciting journey.

Also in March, our Savannah River National Laboratory hosted a visit from a Tokyo Electric Power Company delegation for a series of technical exchanges related to the Fukushima Daiichi Nuclear Power Station (please see Page 9). SRNL has the expertise to potentially assist our global neighbors in bringing a new beginning to that part of Japan devastated by an earthquake and tsunami a year ago this month.

In the community, SRNS was proud to help sponsor a visit from the Juilliard Percussion Ensemble to 300 Allendale, S.C., elementary and middle school students (please see Pages 6-7). Music is transformative, and the Juilliard performance might just change the rhythms of some students' lives for years to come.

In Aiken County, SRNS volunteers brought some new life into projects for deserving agencies and homeowners in need through the annual Project Vision, a part of the United Way's “Days of Caring.” To see the photos from this day-long event, please see Page 5.

Finally, I'd like to offer congratulations to a special SRNS employee. During March, Andre Gray of SRNL marked her 50-year service anniversary (Page 10) at the Savannah River Site. Please join me in thanking Andre for her many years of service.

I hope you enjoy this edition of “SRNS Today.” As always, thank you for your interest in Savannah River Nuclear Solutions.



Savannah River Nuclear Solutions, LLC, is a Fluor partnership with Newport News Nuclear and Honeywell. Since August 2008, SRNS has been the management and operating contractor for the Savannah River Site, a Department of Energy-owned site near Aiken, South Carolina, including the Savannah River National Laboratory. The SRNS corporate and community offices are located in the renovated 1912 “Old Post Office” building in Aiken, S.C.

The primary initiatives of SRNS are national security, clean energy and environmental stewardship.

SRNS Today is published monthly by SRNS Corporate Communications to inform our stakeholders of the company's operational and community-related activities. If you have questions or comments, please contact us at 803.952.9584.

For additional information about SRNS, please visit our website at [savannahrivernuclearsolutions.com](http://savannahrivernuclearsolutions.com).

Small modular reactor plans are at center of MOAs with SRNL, private companies

Three public-private partnerships to develop deployment plans for small modular nuclear reactor (SMR) technologies at the Savannah River Site (SRS) were announced by the Department of Energy (DOE) in March. These Memorandums of Agreement (MOAs) will help leverage SRS land assets, energy facilities and nuclear expertise to support potential private sector development, testing and licensing of prototype SMR technologies.

DOE-SR, SRNS and the Savannah River National Laboratory (SRNL) have entered into three separate agreements with GEN4 Energy (formerly Hyperion Power Generation Inc.); SMR, LLC, a subsidiary of Holtec International; and NuScale Power, LLC. The agreements will help these private companies obtain information on potential SMR reactor siting at SRS and provide a framework for developing land use and site services agreements to further these efforts.

“The Obama Administration continues to believe that low-carbon nuclear energy has an important role to play in America's energy future,” said Secretary Chu. “We are committed to restarting the nation's nuclear industry and advancing the next generation of these technologies, helping to create new jobs and export opportunities for American workers and businesses.”

The Energy Department has taken a number of steps to help jumpstart America's nuclear industry and ensure that nuclear power continues to play an important role in the U.S. energy mix. As part of these efforts, the Department has worked to advance small modular reactors, which provide an important opportunity for America's manufacturing sector to make and sell cutting-edge technology. Small modular reactors have the added advantage of passive safety systems, compact and scalable design and lower capital costs.

“We have a unique combination of nuclear knowledge and laboratory expertise, infrastructure, location and much more to make the Site a natural fit for advancing the small modular reactor technology,” said Dr. Dave Moody, DOE-SR Manager. “We are about reinvigorating SRS assets to impact national needs and influence new missions for the future of the Savannah River Site.”

By strengthening information sharing and access to site facilities and technical expertise, these MOAs will help break down engineering and testing barriers to advanced nuclear reactor research and development while providing these nuclear companies with the resources to support effective deployment plans.

The announcement builds on DOE's work to develop nuclear power as a vital part of America's energy strategy

The Memoranda of Agreement do not constitute a federal funding commitment. DOE envisions private sector funding will be used to develop these technologies and support deployment plans. The agreements, and the officials and offices involved with these activities, are separate and distinct from the Energy Department's Funding Opportunity Announcement for small modular reactor cost-share projects announced earlier this year.



Community support



SRNS donates \$33K to CNTA; Wilson discusses SRS future

SRNS President and CEO Dwayne Wilson (right) presents a \$33,000 check to the Citizens for Nuclear Technology Awareness (CNTA), represented by Clint Wolfe and Dr. Susan Wood. Wilson was the guest speaker at the CNTA March meeting, where he discussed current missions, potential future missions, the status of work funded by the American Recovery and Reinvestment Act and assistance to Japan following the Fukushima disaster (see Page 9 for a related story).



## SRNS participates in 2012 Waste Management Conference in Phoenix

### Awards and accolades

#### SRNS honored with two safety awards

SRNS was recently recognized for its outstanding safety performance by two South Carolina organizations.

The South Carolina Manufacturers Alliance (SCMA) honored SRNS with its SCMA Plant Safety Awards for SRNS Operations and Construction. Facilities with a low rate of incidents resulting in lost workdays, job transfers, or restrictions were nominated for recognition. Plants submitting an incidence rate below the statewide average for their division received an award. Steve Eberhardt, SCMA Plant Safety Conference Chairman and Corporate Safety Manager of Asten Johnson North America, said, "By making the safety and health of our employees a top priority, it is evident that our members are committed to providing a safer, more prosperous South Carolina."

SRNS Operations and Construction was also recognized in March by the S.C. Chamber of Commerce for achieving a commendable lost workday case rate during 2011. "The South Carolina Chamber of Commerce is proud such conscientious companies are operating in our state."



SRNS recently participated in the annual WM12 conference in Phoenix, Ariz., hosted by the Waste Management Symposia (WMS), through employee presentations and panels, a company exhibit and a Silver level sponsorship. Over 25 SRNS and SRNL employees attended the conference.

The WM2012 conference attracted over 2,200 registrants from around the world and provided opportunities for business and professional networking and education. Approximately 200 companies participated as exhibitors at the conference.

Both SRNS and SRNL personnel staffed the company exhibit throughout the show, providing information on SRNS as a company and its accomplishments on Site, focusing on SRNL and Enterprise•SRS.

SRNS President and CEO Dwayne Wilson attended, participating in a panel session entitled "Emerging Issues with U.S. DOE Prime Contractors," in which senior executives from large and small U.S. DOE sites addressed issues in the DOE waste and environmental cleanup program.



Dawn Haygood and Shelby Streetman, both of SRNS Corporate Communications, and David Herman of SRNL, welcomed visitors to the SRNS booth at WM12.



SRNS President and CEO Dwayne Wilson (above, right) talks with James Alexander at Helping Hands about Project Vision, while Wayne Gleanon (photo, right) builds a fence at the same location.



SRNS engineer Joe Ormand (right), leads a team of SRNS employees in building a new front porch and stairs to replace one that was unsafe and rapidly deteriorating for an Aiken County single mother who had recently lost her job.



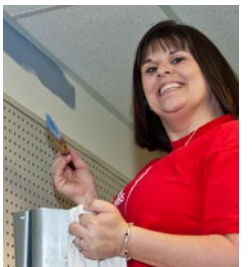
## SRNS volunteers put their hearts into improving life for others

More than 230 SRNS employees worked on 14 separate projects during this year's United Way "Days of Caring" Project Vision, held in late March in Aiken County.

During the event, employees painted walls, mowed lawns and installed fencing, porches, hot water heaters, toilets and new carpeting for agencies and deserving homeowners. The volunteers completed the work on their own time during the day-long event.

"When the day is done, it brings tears to your eyes and joy to your heart when you see the homeowners smile," said Rhonda Whitley, SRNS Project Vision Team Lead.

This is the sixteenth year that SRS employees have participated in this event.



Laurie Posey lends a hand—and a paintbrush—at ACTS in Aiken.



Tina Stefak rolls on paint at the Boys and Girls Club in Aiken.



John Hammet and John Hall install new carpeting at Helping Hands.



#### Aiken County United Way honors Linda Bridgmon

Linda Bridgmon (left) of SRNS Corporate Communications was named the 2012 Volunteer of the Year by the Aiken County United Way (UW) during its annual awards banquet held in March. Bridgmon was honored for her efforts in helping SRS raise more than \$850,000 in a financially difficult year. She has volunteered with UW for 23 years. "I'm very humbled by this," Bridgmon said. "Our employees wanted to get involved and support the community they live in, and our company (SRNS) supports us doing it. We're all motivated, because Aiken County is easy to support, and what the partner agencies do is just incredible."





The Juilliard School and Allendale Elementary may be hundreds of miles apart, but that distance was bridged recently when Allendale students were treated to a concert by some new New York friends. Sponsored by Savannah River Nuclear Solutions in partnership with Juilliard in Aiken, three members of the Juilliard Percussion Ensemble brought the heartbeat of music to this small South Carolina school.

Instruments ranging from traditional drums to xylophones and even a sanza (a thumb piano) were part of the performance for 300 elementary and middle school students.

“This is an important opportunity to culturally enrich the lives of many Allendale public school students,” said Dwayne Wilson, SRNS President and CEO. “The performance provided them with a musical experience and fond memories featuring the renowned Juilliard School of the Performing Arts. We just could not pass up this once-in-a-lifetime opportunity for our friends in Allendale.”



“Allendale is a small place, but through the efforts of SRNS and Juilliard, these talented musicians have brought the world to Allendale,” said Dr. Harold McClain, Superintendent of Allendale County Schools.

The ensemble featured a number of musical genres including Latin American and African drumming. Immediately following the performance, the Juilliard musicians worked one-on-one with members of Allendale’s Steel Band during a special seminar.

Myrakel Moore, a third grade student at Allendale Elementary, reflected on the experience. “I think that it was wonderful and I want to go to a school like Juilliard to be a part of something that is that amazing.”



Photos: (Clockwise from upper left) Samuel Budish, Ian Sullivan and Mike Truesdell of the Juilliard Percussion Ensemble perform for Allendale students; SRNS President and CEO Dwayne Wilson talks with fourth grader Kadeem Barker; students eagerly anticipate the performance; Sullivan taught a percussion class at the school, and demonstrated a sanza for the students.



JUILLIARD

BRINGS THE BEAT TO ALLENDALE



## 2012 Regional Science Fair draws hundreds of competitors

In the community



### Biomass Facility Startup

Under Secretary of Energy Thomas D'Agostino (pictured above) recently joined U.S. Representative Joe Wilson (R-SC) and other senior officials from DOE and Ameresco, Inc., an energy efficiency and renewable energy company, to mark the successful operational startup of a new \$795M renewable energy fueled facility at SRS. The Site is managed and operated by SRNS for DOE.



### SRNS at "Augusta Day"

SRNS recently participated in the Greater Augusta Day in Atlanta at the Georgia state capital building. Hosted by the Augusta Metro, Columbia and Burke County Chambers of Commerce, this regional effort promoted awareness of the CSRA's economic sectors including health care, higher education, manufacturing, military, nuclear technology and tourism. Shown at the SRNS display are (from left) Susie Ferrara of SRNS Corporate Communications; Representative Henry "Wayne" Howard, Chairman, Augusta-Richmond County Legislative Delegation; and Walter Wilson of SRNS and Augusta Metro Chamber Board of Directors member.

**With the support of DOE and SRNS**, hundreds of CSRA science-savvy students participated in the 2012 Savannah River Regional Science and Engineering Fair competition.

More than 300 students qualified for this event representing schools from a 20-county region located within the greater Aiken-Augusta area and taking place recently at the University of South Carolina - Aiken (USCA).

The Grand Prize winner, Nathan Schmitz, will receive an all-expense paid trip to Pittsburgh, Pa., to compete at the INTEL International Science and Engineering Fair May 2012.

"The range and variety of project themes and experimental topics are always interesting," said Carol Barry, SRNS Director, Workforce Services. "The students' passion for this event and use of creativity within each project continues to impress me."

SRNS is coordinating this competition for the fifth year, ensuring an educational and rewarding experience for each student competitor. Other co-sponsors include USCA and Savannah River Ecology Laboratory (SREL).

The Savannah River Regional Science and Engineering Fair gives young people from the area the opportunity to explore the world of science and technology and develop their scientific investigation skills and knowledge by planning, constructing and exhibiting their own "hands-on" science projects.

Projects are judged for scientific reasoning, creative ability, thoroughness, technical skill and clarity. More than 40 volunteers from SRS, SREL, USCA and the community participated as officials and judges for this competition.

Photo: Families tour hundreds of exhibits at this year's Savannah River Regional Science and Engineering Fair.



## SRNL hosts Japanese delegation for sessions on cleanup capabilities



Dr. Shunichi Suzuki (center), Director of the Materials Engineering Center and Engineering for the Fukushima Daiichi Recovery R&D Center, is welcomed to SRS by Dwayne Wilson (right), SRNS President and CEO, and Dr. Terry Michalske (left), SRNS Executive Vice President and SRNL Director.

**SRNL was one of two DOE National Laboratories** that hosted visits with a delegation from the Tokyo Electric Power Company (TEPCO) for a series of technical exchanges related to TEPCO's Fukushima Daiichi Nuclear Power Station. At the invitation of Deputy Secretary of Energy Daniel Poneman, the nine-member TEPCO delegation visited SRNL Feb. 29 through March 2, and Pacific Northwest National Laboratory (PNNL) in Richland, Washington, March 5-7.



The visit built on two previous workshops held jointly by the Government of Japan and the DOE, first in Tokyo and most recently in Washington state.

"We are honored to have a constructive dialogue with our TEPCO guests," said Dr. Terry Michalske, Executive Vice President of SRNS and Director of SRNL. "Japan faces a long-term cleanup challenge in the years ahead, including many specific issues that are familiar to SRS. We have a successful history of developing and deploying technology to support complex long-term cleanup and remediation; an important mission of a National Laboratory is to find ways to make that expertise available within the global nuclear community. We also expect that going forward, we have much to learn from TEPCO that will be important to our own nuclear knowledge base."

The SRNL sessions included presentations by TEPCO and SRS experts, along with tours of selected SRS projects and facilities operated by SRNS and Savannah River Remediation (SRR). SRNS operates the National Laboratory, key nuclear materials facilities, and site cleanup projects; SRR is the contractor responsible for SRS high level waste management.

TEPCO delegates conducted discussions with SRNL and PNNL teams in areas that included radiation detection, fate and transport of radionuclides, treatment and reuse of contaminated water, inspection and characterization of spent fuels, stabilization and decontamination of reactor sites, as well as characterization, remediation and control options for contaminated soils, biota and water in surrounding regions.

SRNL and PNNL have developed significant science and technology capabilities for addressing the decontamination and decommissioning of major nuclear facilities in the U.S. The two national laboratories have been working together to bring the best and the integrated capabilities of both labs to bear on the challenges of Fukushima.



### SRNL to participate in streamlined partnership agreements with industry

SRNL is one of eight national laboratories that will participate in a pilot initiative to make it easier for private companies to utilize the laboratories' research capabilities. The program will harness advantages in innovation to create jobs and accelerate the development of new clean energy technologies.

Previously, companies wishing to partner with the laboratories for commercial research had two options: signing a Cooperative Research and Development Agreement (CRADA) or a Work For Others (WFO) Agreement. The laboratories participating in this pilot program intend to offer a third, more flexible option: an Agreement to Commercializing Technology (ACT).

There will be more flexibility in negotiating over the intellectual property (IP) rights for technologies created at the laboratory. While the labs generally have had limited flexibility on IP terms under CRADAs and WFO arrangements, an ACT will allow both parties to develop a specialized arrangement that will facilitate moving the technology into the marketplace as quickly as possible.

The other labs are Ames Laboratory, Brookhaven National Laboratory, Idaho National Laboratory, Lawrence Livermore National Laboratory, National Renewable Energy Laboratory, Oak Ridge National Laboratory and Pacific Northwest National Laboratory.



# Andre Gray: 50 years at SRS

**At the outset**, the event was a routine safety and all hands meeting for SRNL's Defense Programs Technology Directorate.

And then...a surprise broke out. SRNL President Dwayne Wilson, SRNL Director Terry Michalske, staff and visitors honored SRNL's Andre Gray in recognition of her 50 years of service.

Wilson and Michalske were joined March 22 by current or former SRNL managers Bill Holtzscheiter, John Marra, John Veldman and Clint Wolfe in recognizing the rare milestone for the unsuspecting Gray.

Gray actually began her site career in 1960, working in the purchasing department for DuPont construction. After a brief break in service ("not by my choice," she points out) she rejoined DuPont in the typing pool, eventually settling in SRNL where she has spent the majority of her career. Today, she serves in the Hydrogen Technology Research Laboratory, and acts as a "sentry" to the Laboratory's entrance.

Amidst an exchange of one-liners about age and the passage of time, Wilson summarized her Site employment history, thanking Gray for "dedication and contributions to SRNL, the company and the nation. You have clearly touched a lot of people, and that's the contribution that really matters."

Wilson presented Gray with an engraved box that included notes from co-workers expressing appreciation and remembrances.

All of the speakers – particularly her former managers – noted common themes: attention to detail, security consciousness, plain speaking, and a knack for keeping people out of trouble. As Wolfe put it, "I enjoyed reporting to her more than any other manager I ever had."

For her part, Gray said the surprise was total. "I thought this was a motivational dinner. Normally, you can't surprise me, because I try to know everything, but this is a complete surprise. I knew there had to be a reason they sat me at this front table."

She has no plans to stop at 50 years. "I still enjoy working with all of you," she said, "so I'm not finished yet."

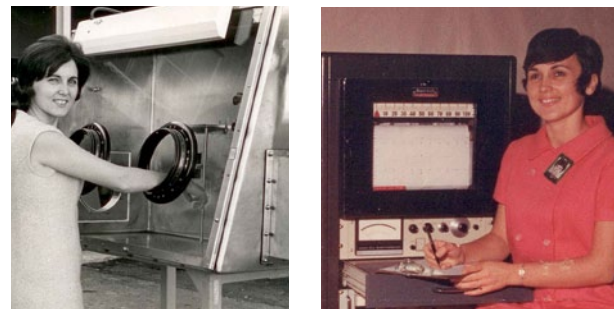


SRNS President and CEO Dwayne Wilson present Gray with a token of appreciation from the company.

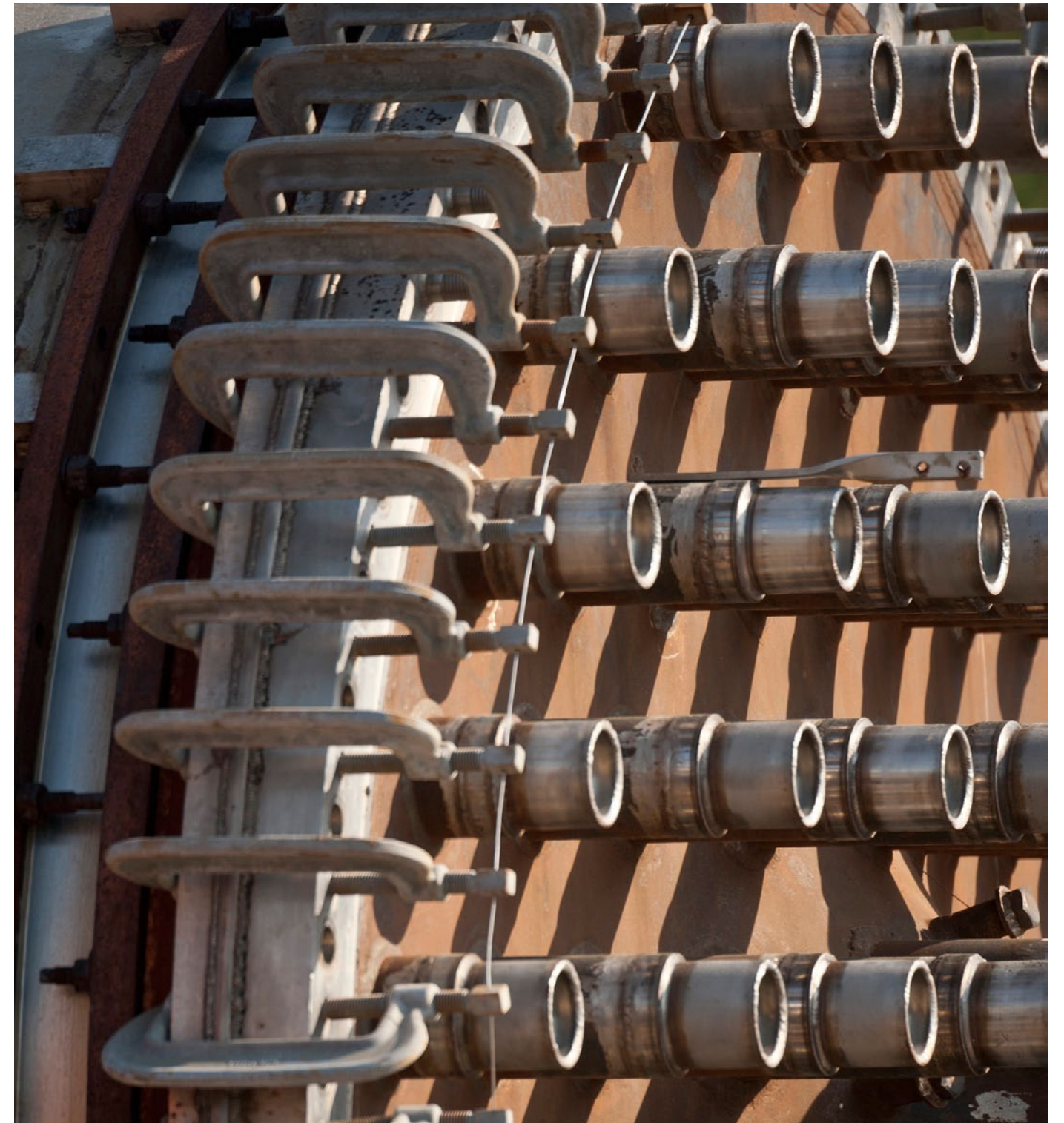


"I still enjoy working with all of you, so I'm not finished yet."

Andre Gray



Photos: (from top) Andre Gray with a commemorative plaque presented to her during the ceremony; an unsuspecting Gray at the "all-hands" meeting; historical photos of Gray during her career at SRNL.



Scenes  
of SRNS

A heat exchanger at SRS becomes a piece of metal sculpture in this close-up afternoon shot.  
(Photograph by Steve Ashe)



Savannah River Nuclear Solutions is creating  
a new and exciting future at the Savannah River Site.



SRNS offers uniquely skilled people, diverse nuclear operations and research facilities, and first-of-a-kind technologies to spark business opportunities throughout the nation and beyond.



We're home to the Savannah River National Laboratory, an engine for growth in advanced environmental and national security technologies, as well as clean energy research.



Savannah River Nuclear Solutions.  
Leading the way in innovative and creative solutions  
for our nation's most pressing initiatives.

