



## Points of Interest:

- Education Committee Updates
- Essay Contest & Educator Grants Programs in 2021
- 2020 Maher Scholarship Awarded
- Communications Committee Updates
- CNTA Goes Virtual
- Young Professionals Fundraiser
- 18th Annual Charity Golf Tournament
- Distinguished Scientist Award Winner Announced
- Nuclear Service Award Winner Announced
- Updates from the CNTA Office
- CNTA Committees
- ANS Winter Award Winners
- SRR Donation to SRS **Retirees' Resource Center**
- SRNL, LANL Collaborate to prepare for NNSA Pit Mission
- Innovative Tank Waste Processing Technology Resumes
- Breakthroughs in Additive Manufacturing
- Virtual Field Trips to SRS
- McMasters, SRNS Announce Apprenticeship Commitment
- First Nuclear Fuel Shipment for Vogtle Unit 3
- Thanks to Our Members
- Mission of CNTA
- Board of Directors
- Membership Information
- How YOU Can Help
- [Calendar of Events](#)

## Update from our Executive Director

I saw an internet meme the other day that referenced the iconic movie “Back to the Future.” The image shows Doc Brown talking to Marty McFly warning “Whatever happens, Marty, don’t ever go to 2020!” Yes, 2020 has been a challenging year. Despite the challenges, we at CNTA are thankful that we were able to continue much of our outreach and education activities.

Providing scholarships to deserving students was one way that we continued our educational support. In 2020, CNTA awarded over \$10,000 in scholarships. We also expanded our Educator Grant program this year by awarding six \$500 grants to middle and high school teachers for innovative activities in their classrooms.

We continued to support STEM education by participating in in-person events prior to the pandemic and supporting virtual and socially-distanced events later in the year. We also worked with Aiken County Public Schools to provide on-line resources to high school teachers.

Although we have had limited in-person events for our members, we have strived to continue **our outreach efforts. We held seven “Up and Atoms” with the latter ones being virtual. We also conducted four “Tap into Nuclear” young professional mentoring events again using the assistance of virtual technology for ones later in the year.**

On the fundraising front, we held our annual golf tournament at Houndslake Country Club (delayed to October this year) and a Low Country Boil at the Palmetto Golf Club. The Low Country Boil event hosted by our Young Professionals Committee raised funds to offset **membership fees for young professionals to join CNTA and to support future “Tap into Nuclear” mentoring events and educational outreach. We were able to hold both events safely thanks to the support of our volunteers and the cooperation of the participants. Thanks to all!**

During this season of thanks, we are especially thankful for our CNTA members and friends who supported the organization and patiently helped us navigate through this difficult year. It is the efforts of our members that make our organization successful!

Looking forward to a bright 2021!

Jim

At the end of our 29th year in existence we would like to thank the thousands of members, volunteers, and staff who have supported our mission to educate the public on all things nuclear.

**We don’t exist without you.**

Happy Holidays! We hope to celebrate with you in 2021!



## Education Committee Updates

### STEM Goes Virtual

Like everything else in 2020, STEM, STEAM, and education outreach has gone virtual.

This fall CNTA participated in a variety of outreach activities. Some of them include:



- DIG Festival in Williston SC— Provided two “kits” for students to use safely from their car and at home. Materials for both were generously sponsored by SRNL.
- SEED at RPSEC at USCA— Provided for their use the winning video from our 2018 Video Contest. This 3-minute film featured two middle school students interviewing an expert on the importance of nuclear technology in the medical field.
- Nuclear Blitz— As guests are not allowed in the Aiken public school system we have provided videos and made available subject-matter experts to high school science teachers.

- Have continued our sponsorship and support of the 2021 Future City Competition.

Plans for 2021 are underway and include teaching a Lifelong Learning class at USCA, a project with SRNS and SCSU, a positive change to our Aiken Technical College Nuclear Scholarship, and more!

**Use of Gloveboxes**

Sponsored by Citizens for Nuclear Technology Awareness

Scientific and health professionals that use gloveboxes (due to their chemical, biological or radioactive nature). These materials are also applicable to environmentalists such as air that may cause dangerous reactions. Gloveboxes must work with these materials in a "closed environment" where it is not possible for these materials to be freely released. The containment also protects the worker from materials that can cause themselves to explode.

A Glovebox is used by scientists to perform experiments with these materials. The entire contents of a sealed box where the materials are isolated and contained. It has an airtight cabinet prevents into the box where the worker can see their hands but not directly touch the material. This provides the safety the worker needs, but to construct nuclear working with the materials very difficult. Often the scientist uses special tools to help them perform the experiments in the glovebox.

In this kit, you will perform your own working in a glovebox by inserting Lego blocks under gloves and containing an air stream.

Put the gloves on your hands - notice that you cannot touch the your fingers! Take the rubber band and stretch around your arms at your elbows - now you cannot see it! spread your arms out little and the rubber band stays tight while doing this exercise. Now take the Lego blocks and assemble them into a shape. See if you can pull the blocks apart and make another shape.

**Fun fact - There are more than 10 million different ways to arrange the 7 Lego blocks in this kit!**



## Essay & Educator Grants for 2021

**Want up to \$500 for STEM Classroom Projects?**

CNTA's Educator Grants Program awards money for STEM projects (and supplies) to area middle & high school teachers!

The 2021 Educator Grant Program is now seeking applications for STEM activities in the classroom we can help fund!

**Previous winning projects:**

- Storage, Distribution and Control of Electrical Energy
- Using Cloud Chambers to Visualize Ionizing Radiation
- Full STEM Ahead - Let's get ready to CODE!
- Board & Support Writing Fabricator
- High Tech Spy Tech- Drones in the Classroom

**Deadline: JAN 31, 2021!!**

Application and information available at: <https://cntaware.org/educator-grants-program/>

For more information email: [cnta@bellsouth.net](mailto:cnta@bellsouth.net)

CNTA is an Aiken-based charitable educational organization dedicated to providing factual information about nuclear tech and educating the public on nuclear issues.

Both the Essay Contest & Educator Grants Program were **launched in October for 2021's awards.** The Educator Grants program remains unchanged from last year; however, there are exciting changes to the Essay Contest!

This year, Savannah River Remediation has partnered with CNTA to increase the number of awards including new second place scholarships.

Instead of offering \$500 to the essay contest winners' teachers we are redistributing these funds to support additional student awards!

Details and applications for both programs can be found on our website.

CNTA will send a call out to its volunteers to help judge these contests in early February so keep an eye out on your email!

**15<sup>th</sup> Annual CNTA High School Essay Contest**

**WIN up to \$1,000\***

**Open to:**  
High School Juniors & Seniors  
Aiken, Allendale, Barnwell, Burke, Columbia and Richmond County schools and homeschools

**Write a 1,500 word essay on one of the following:**

- Discuss the relative carbon footprints and other by products (air pollution, etc.) of four major electrical energy generation technologies: Coal, natural gas, nuclear and solar power with respect to their impact on global warming and environmental impact.
- Nuclear waste is a byproduct of producing nuclear power and performing nuclear defense work. The waste needs to be remediated to make it safe for people and the environment. Discuss current waste disposition methods and how we can continue to ensure our world continues to deal with the waste safely and securely?
- Discuss the use and lifecycle of nuclear technology in medicine.

**Deadline: February 28, 2021**  
Details and Entry form at: <https://cntaware.org/high-school-essay-contest/>

For more information email: [cnta@bellsouth.net](mailto:cnta@bellsouth.net)

\*Top 3 entries will win \$1,000 each. Up to 5 "second place awards" of \$500 will also be distributed.

Sponsored in part by **SRR Savannah River Remediation**  
AMENTURE | BECHTEL | JACOBS | BWX2

## 2020 Maher Scholarship Winner Announced

Citizens for Nuclear Technology Awareness (CNTA) and Savannah River Remediation (SRR) announced South Carolina State University student **Shai'Anthony Huff** as the winner of the 2020 Robert Maher Memorial Scholarship.

The scholarship is sponsored by SRR, the liquid waste contractor for the U.S. Department of Energy at the Savannah River Site (SRS).

Huff, who is from Eastover, South Carolina, is a nuclear engineering student at S.C. State University. CNTA Executive Director Jim Marra said CNTA is proud to award this \$5,000 scholarship to such an ambitious, enthusiastic, and deserving student.

**“Shai'Anthony has a great passion to pursue nuclear research, continue her education, and grow her knowledge and experience in the field,”** Marra said. **“All these go-getter qualities make Shai'Anthony the ideal candidate to award this scholarship. No doubt she will be an exemplary addition to the nuclear industry.”**



Huff recently participated in an independent research project in partnership with Clemson University. The project involved Sequential Extraction Procedure for the Speciation of Particulate Trace Metals in radioactive soil. Last summer, she held an engineering intern position conducting research in the Medical Physics Department at the University of Wisconsin.



**“The jobs of physicists have always been intriguing, from the complexities of data analysis and evaluations, to applying laws of science to devise methods and develop experiments. More specifically, health physicists and the basis of radiation safety,”** Huff said.

After graduating with a bachelor's degree, she plans to obtain her doctorate degree in health physics. She aspires to be Nuclear Reactor Health Physicist.

**“My number one concern is workers within these nuclear facilities maintaining proper radiation usage and that their exposure is minimal; nuclear is our future, past, and present,”** Huff said.

The Robert Maher Memorial Scholarship is a joint project of CNTA and SRR. Maher, Vice President and General Manager for Strategic Mission Development at SRS, passed away in 2002 after a 48-year career at the Site. **A visionary with a broad view of the Site's potential, Maher helped shape SRS.**

The annual scholarship was established in Maher's memory to support students pursuing science and engineering degrees in preparation for careers in the nuclear field. Details on the scholarship can be found at: <https://cntaware.org/maher-memorial-scholarship/>. Applications for the 2021 Maher Memorial Scholarship will be available starting in April.

Huff and her family were invited to CNTA's Low Country Boil on October 17th at Palmetto Golf Club and were recognized by SRR President & Project Manager Phil Breidenbach.



## Communications in 2020

### Nuclear Science Week Insert



Our Nuclear Science Week Insert in the *Aiken Standard* is a year-long project the communications committee dedicates itself to. The 2020 insert (and previous years) are available online at: <https://cntaware.org/nuclear-science-week/>. Paper copies are available in the CNTA Office.

The insert is sent to over 30,000 households in the Aiken area and has been viewed thousands of times online.

We would like to thank Lindsey Monbarren (SRNS) for her work as editor of the insert and Dean Campbell (SRR) for his years of service as our Communications Committee Chair. Dean is stepping down as chair at the end of this year, but promises to still be involved on the committee **and on CNTA's Board of Directors.**

The communications committee is always looking for help. Whether it be writing press releases, organizing the annual insert, our social media presence, or updating the website—if you have an interest in shaping **CNTA's public image please contact us!**

### Community Gift Card Program

This summer CNTA launched the Community Gift Card program. This serves a dual purpose of helping us with items for our event raffles and helping our local businesses that are struggling.

To date this program has raised over \$1,000! Contributions of cash were used to purchase gift cards, and hundreds of dollars in gift cards to places in the CSRA were delivered to our office.

**Thanks to all who participated!**



This program is coming with us into 2021 as our local businesses (restaurants, retail etc.) continue to struggle. Contributions will be used to purchase gift cards for the 2021 CNTA Golf tournament & Young Professionals Event. You can donate directly at: <https://cntaware.org/about-us/> or drop off/mail gift cards to our office.



### CNTA @ 30 Planning

CNTA is planning 2021 with all eyes on celebrating our 30th Anniversary. We have many ideas being discussed on how to acknowledge this achievement and want your input! As CNTA is a grassroots member run organization we exist because of, and for you.

If you have suggestions or want to be involved in the planning please let us know!

## CNTA Goes Virtual

### Virtual Up & Atom Series

CNTA took its Up & Atom series virtual this year. Utilizing Zoom, we have hosted a great lineup of speakers **this year. In lieu of payment for a ticket to the event we've asked members attending to donate to one of CNTA's programs and the results have been fantastic! Thank you all who participated and donated this year.** Recorded Up & Atom speakers can be found at: <https://cntaware.org/virtual-up-atoms/>

Fall 2020 Lineup:

- August 26, 2020– **Dave Amerine** “Status of Nuclear Power in the United States”
- October 7, 2020– **Phil Breidenbach (SRR)** “SRR: Delivering Results in 2020”
- October 22, 2020– **Jim Marra & Special Guests (sponsored by HII)** “CNTA Outreach & Operations in 2020”
- November 11, 2020– **Brian Reilly (Bechtel)** “Construction Update on Plant Vogtle Units 3 & 4”
- December 2, 2020– **Dr. Jonathan Cirtain (BWXT)** “The Nuclear we Need”

Speakers are currently being lined up for 2021.

CNTA will continue with virtual Up & Atoms but hope to return to in-person events as soon as possible.

If you have suggestions on speakers please let us know!

#### Up & Atom Virtual Series



**David Amerine** is kicking off our Virtual Series with a talk on “The Status of Nuclear Power in the United States”

He has 44 years of experience in the nuclear industry. He began his career in the U.S. Navy, after graduating from the United States Naval Academy and obtained a Masters in Management Science from the Naval Post Graduate School while in the Navy.

#### Up & Atom Virtual Series

**“Savannah River Remediation: Delivering Results in 2020”**



**Phil Breidenbach**, President & Project Manager, SRR

As Savannah River Remediation (SRR) President and Project Manager and Ametium Group Vice President, Phil Breidenbach oversees a complex, integrated set of Savannah River Site (SRS) liquid waste facilities that are connected to virtually every SRS mission involving nuclear materials.

You are invited to join  
**Citizens for Nuclear Technology Awareness**  
for the next Up & Atom, sponsored by BWXTechHubs, Inc. (BWXT)



**The Nuclear We Need:**  
Advancing Technology for the World's Greatest Power Source

Sponsored by Dr. Jonathan Cirtain, Chief Technology Officer, BWXT  
Zoom Webinar: 8:00 a.m.,  
Wednesday, December 2, 2020

### Virtual Tap Into Nuclear

Like everything else in 2020 Professional Development at CNTA has gone virtual. The Tap Into Nuclear Series kicked off this fall with an event cohosted by WIN-SR. The topic “**Why Work doesn't Happen at Work**” prompted some lively discussion among the panelists.

Their second event this fall was on December 9th and focused on job changes during the pandemic. Panelists shared their perspective on finding a new position on site, making the transition, and managing new employees during a time when many people are working remotely.

Virtual Tap Into Nuclear events can be viewed at: <https://cntaware.org/virtual-tap-into-nuclear/>

**If interested in planning 2021's events, or if you have topics you'd like this program to cover please let us know!**

### Virtual Meetings

All CNTA committees and boards have met virtually or via conference call since March. The communications committee, young professionals committee, education committee, executive committee and the full board of CNTA have all held virtual meetings this year. To learn more or to get involved contact us at [cnta@bellsouth.net](mailto:cnta@bellsouth.net).

CNTA researched many virtual platforms before deciding on Zoom. While it is not ideal for those on site, it is the most **efficient use of CNTA's limited resources. All virtual events are recorded and posted for later viewing on our website.**

# CNTA Young Professionals Fundraiser

## A Southern Tradition Raises Funds for CNTA Young Professionals

The Citizens for Nuclear Technology Awareness (CNTA) Young Professionals Committee recently held a successful low country boil event as an annual fundraiser for the organization.

**The event raised more than \$10,000 to support CNTA’s outreach to young professionals, including free membership for young professionals and events like the Tap into Nuclear series.**



Due to the Covid-19 pandemic, attendance was limited this year and tickets were not available to the general public. **The evening included live music by Keith Gregory, raffles, and low country boil from JC’s Seafood in Aiken.** Newberry Hall provided sliders, chili, and cookies.



Savannah River Remediation (SRR), the liquid waste contractor at the Savannah River Site, was the platinum sponsor. At the event, SRR President & Project Manager Phil Breidenbach recognized the 2020 Robert Maher Memorial Scholarship winner. This scholarship is presented annually by CNTA, and sponsored by SRR, to a college student pursuing nuclear as their career.

**This year’s winner was Shai’Anthony Huff, a nuclear engineering student at S.C. State University.**

Other sponsors of the event included:

- Gold Sponsors- Huntington Ingalls Industries, Model Performance, Southern Nuclear, and Savannah River Nuclear Solutions
- Silver Sponsors– Applied Research Center, Jacobs, and SRSCRO
- Bronze Sponsors– Centerra, Emerson ASCO, Jason Crane of Edward Jones, Merrick, Security Federal, and SRNL



**The Young Professionals Committee will start organizing in January for 2021’s event. Please consider volunteering to help!**



2020 event committee: John Ekechukwu, Sunny Lunka, and Matt McCoy. Not pictured: Josh Flach





## Charity Golf Tournament

Jim Marra, the Executive Director of Citizens for Nuclear Technology Awareness (CNTA), today declared the 18<sup>th</sup> Annual CNTA Charity Golf Tournament held on Friday, October 2 at Houndslake Country Club in Aiken, SC to be a great success.

**“With the weather cooperating and Covid-19 precautions in place, the golf tournament was a tremendous success,”** said Marra. **“With 27 teams participating, we raised a net \$17,000 for CNTA.** This demonstrates the continued support from membership, volunteers, and sponsors from the local nuclear industry.”

**“This tournament is one of CNTA’s most important annual fund-raisers,”** Marra continued. **“It was a fun, competitive event and a great networking opportunity for participants. With so many nuclear related activities in our community, it will help CNTA promote and educate the public on nuclear technology. We are planning on a similarly successful event in 2021.”**

The winning contest participants and their teams include:

- First Low Net – Brian Morton, Gene Rhodes, Chris McBride, David Scott (SREL)
- Second Low Net – Don Taylor, Nick Nichols, Jhivaun Freeman Pollard, Patricia Dunlap (Jacobs 2)
- Third Low Net – Torry Walker, Joe Smith, Dawson Chastain, Blake Busby (SRNL-E)
- Low Gross – Jeff Leita, John Tihey, Pete Hill, Keith Wood (Amentum)
- Closest to the Flag #3 – Dakota Hunter (Globalpundits 2)
- Closest to the Flag #13 – Byron Brown (Southern Nuclear)
- Closest to the Flag #17 – Kenneth White (White Financial Group)
- Straightest Drive – Pat Dunlap (Jacobs 2)

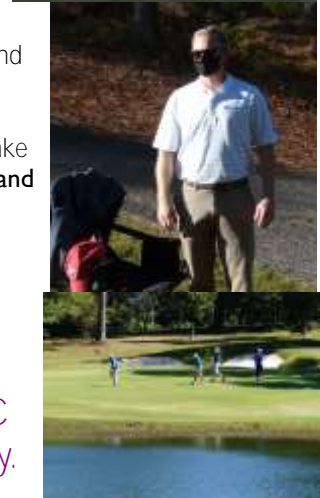
CNTA thanks its corporate sponsors for their invaluable contributions. These include:

- Heritage Sponsor – Model Performance Group
- Shirt and Lunch Sponsor – Savannah River Nuclear Solutions
- Beverage and Prize Sponsors – Huntington Ingalls Industries, Globalpundits, Northwind, and Jacobs
- Hole Sponsors – Southern Nuclear, Merrick, Floyd and Green Jewelers, Centerra Savannah River Site, Economic Develop Partnership of Aiken and Edgefield Counties, SRS Community Reuse Organization, and the SRS Heritage Museum
- Team Sponsors – Amentum, Bechtel, BWXT, Habitat for Humanity, Parsons, Savannah River Ecology Laboratory, Savannah River National Laboratory, Savannah River Remediation, and White Financial Group

Marra added that CNTA was greatly appreciative of the volunteers and donors who helped make **this year’s golf tournament a tremendous success.** **“CNTA exists as a grassroots organization, and events like these would not be possible without our community’s support.”**

A photo gallery of teams and volunteers is available at: <https://cntaware.org/annual-golf-tournament/>

Plans are underway for the 19<sup>th</sup> Annual CNTA Charity Golf Tournament. It will be held at Houndslake Country Club in Aiken SC on May 7, 2021. Details and team sign-up will be available in February.



## Distinguished Scientist Award Winner Announced

Citizens for Nuclear Technology Awareness (CNTA) is pleased to announce that the winner of the 2020 Fred C. Davidson Distinguished Scientist Award is Dr. Paul F. Cloessner. This prestigious award was announced on October 22, 2020 at the Up and Atom breakfast in Aiken, SC.

Dr. Cloessner is a Laboratory Fellow at the Savannah River National Laboratory (SRNL) at the Savannah River Site (SRS). He advises SRNL, corporate, and government leaders on critical national security issues and serves on the National Nuclear Security Administration (NNSA) Defense Nuclear Nonproliferation Advisory Council. He is a nationally recognized authority on heavy water reactor fuel production, plutonium production and uranium recycling, tritium production and processing, warhead gas transfer systems, and high level waste management.



Dr. Cloessner received his B.S. in Chemistry at Louisiana State University in 1979 and his Ph.D. in Nuclear Chemistry from Florida State University in 1985. Since starting as a Research Chemist at SRNL in 1984, he continually moved up to more challenging positions with greater responsibility. These include Manager for Weapons Technology in 1998, Director of Defense Programs Technology in 2003, and Director of Nonproliferation Technology in 2010. He was named the Deputy Associate Laboratory Director in 2010, Laboratory Fellow in 2013, and Vice President NNSA Chief Business Officer in 2018.

**Dr. Cloessner's technical and managerial acumen were evidenced by his development of the enterprise strategy for SRNL and his leading a NNSA effort across multiple sites to establish a codified and accurate plan for the management of the nation's tritium supply. He also made important contributions to the 2018 U.S. Nuclear Posture Review to guide future nuclear security policy and nuclear weapons strategy.**

Dr. Cloessner received the American Society of Testing and Materials Nuclear Fuel Cycle Achievement Award in 1994, the Sandia National Laboratory SP981 Stem Remediation Project Award in 1999, and the NNSA Defense Programs Award of Excellence in 2015. He is a member of the American Physical Society, the Institute of Nuclear Materials **Management, the American Nuclear Society, serves on the CNTA Board of Directors and CNTA's Executive Committee.**

**"Dr. Cloessner serves as a resource in problem solving for staff of all levels," said Laboratory Director Dr. Vahid Majidi. "I have found Paul to be a great mentor and an irreplaceable asset at SRNL."**

**"One of Paul's strengths is recognizing issues of national and international strategic importance, working with colleagues within the Nuclear Weapons Complex to build coalitions of experts, and elevating these to the attention of senior government leaders and policy makers," said David Wilson, SRNL Associate Laboratory Director for National Security.**

**"Dr. Cloessner has a remarkable blend of intelligence, experience, judgment, passion, and humility that makes him an exceptional technical expert and leader," said David E. Eyster, Los Alamos National Laboratory Associate Director. "I could always rely on Dr. Cloessner to provide exceptional leadership to any organization we asked him to lead, delivering exceptional results with high quality and efficiency."**

The Distinguished Scientist Award is presented annually to recognize regional scientists and engineers who have made exceptional lifetime scientific achievements. The award is in honor of Dr. Fred C. Davison who was Chairman of CNTA's Board of Directors from 1994 until his death in 2004.

Davison was President of the University of Georgia for 19 years where he encouraged math and science education and managed the doubling of graduate enrollment. Davison was also President and Chief Executive Officer of the National Science Center Foundation, President of the Georgia-Carolina Boy Scouts Council, an elder at Reid Memorial Presbyterian Church, and an active Rotarian.



## Nuclear Service Award Winner Announced

Citizens for Nuclear Technology Awareness (CNTA) is pleased to announce that the winner of the 2020 Nuclear Service Award is Dr. Susan Wood. This prestigious award was announced on October 22, 2020 at the Up and Atom breakfast in Aiken, SC.

Dr. Wood retired in 2002 following a long and distinguished career managing the Westinghouse Manufacturing Technology Center in Baltimore, MD and serving for eight years as the Director of the Savannah River Technology Center at the Savannah River Site. She received her Hons. B.Sc. in Materials Engineering, her M.S. in Metallurgical Engineering, and her Ph.D. in Materials Engineering from the University of Pittsburgh. She holds patents in materials engineering and is the author of more than 30 papers for scientific journals, seminars, reports, and presentations. She also served on the DOD Defense Science Board and as a mentor for the Defense Science Study Group at the Institute for Defense Analyses.

**Dr. Wood's impact on the local nuclear community is extraordinary.** She served on the CNTA Board of Directors from 2003 to 2019 and was chair from 2004 to 2012 and from 2018 to 2019. She was appointed by the Governor of South Carolina to the Technology Council in 1997 and in 2001 to the Technology Transition Team Steering Committee. She is on the Board of Trustees for the South Carolina Research Authority and the Board of Directors for the Southeastern National Sciences Academy.



Dr. Wood is committed to the education of students across the region in STEM fields. She helped initiate the CNTA High School Essay Contest, helped develop the CNTA Educator Grants Program, and chairs the Robert Maher Memorial Scholarship committee. **Dr. Wood has volunteered for countless educational outreach opportunities including "Bringing Nuclear to the Classroom" workshops, Science Education Enrichment Day, SRS Retirees Association events, and Aiken Earth Day. She is a founding sponsor of "Introduce a Girl to Engineering Day" at the USC-Aiken Ruth Patrick Science Center and previously served on the Board of Directors for the United Way of Aiken County.**

Dr. Wood received the Society of Women Engineers Upward Mobility Award in 1997, the Federal Laboratory Consortium for Technology Transfer Laboratory Director of the Year Award in 1999, the National Management Association Savannah River Chapter Executive of the Year Award in 2001, and the CNTA Distinguished Scientist Award in 2002.

**"Susan Wood is one of the most influential members of our nuclear community and her actions have made Aiken a better place to live,"** said Vice Admiral Charles L. Munns, USN (ret). **"Aiken has many incredible citizens connected to our nuclear community, but I cannot imagine any of them more worthy and deserving than Susan Wood."**



**"You would see Susan Wood at almost every outreach event promoting the benefits of nuclear technologies,"** said Sharon Marra, Savannah River National Laboratory (SRNL) Deputy Director. **"I have been personally inspired by Susan's ability to lead and impressed by the time and effort she has spent educating our community and future generations of leaders."**

**"Susan has served as a mentor to me. She has invested her time and energy into education outreach and mentoring students, especially women, to pursue STEM careers, and I am honored to learn from her example,"** said Marissa Reigel, R&D Execution Manager for Actinide Materials Science and Technology at SRNL.

The Nuclear Service Award is presented annually to recognize accomplishments in applying nuclear technology, advancing education in nuclear technology, increasing public awareness of the benefits of nuclear technology, and in promoting and defending the safe and effective use of nuclear technology.

## Updates from the CNTA Office

While the CNTA office on Whiskey Road may have been closed to the public for much of the year, we are still working daily to educate the public on all things nuclear.

**Changes are on the way in 2021! To kick off the year of celebrating CNTA's 30th Anniversary we are retiring** [cnta@bellsouth.net](mailto:cnta@bellsouth.net) and will be switching over to [@cntaware.org](mailto:@cntaware.org) emails. Make sure to update your address books now!

Our Executive Director Jim Marra can be reached at: [EXECUTIVEDIRECTOR@CNTAWARE.ORG](mailto:EXECUTIVEDIRECTOR@CNTAWARE.ORG)  
All CNTA event notices, membership information, and other business will come from: [OFFICE@CNTAWARE.ORG](mailto:OFFICE@CNTAWARE.ORG)

We will reopen the office to regular business once SRS and other area businesses return to full normal operations. Until then, we are here if you need anything or have any questions. Please do not hesitate to contact us via email. We will be delayed in responding to phone calls, but will respond as quickly as possible.

## CNTA Committees

If you are interested in volunteering for a committee, please email the chair. If you want to participate in one-time opportunities just let us know! All CNTA Committees are currently meeting via virtual conferencing.

### Communications Committee

Description: The Communications Committee is responsible for ensuring accurate and timely information to the media, stakeholders, and the public and to reflect the goals and objectives of CNTA. They are responsible for the public image of CNTA in the press, on our website, and on social media platforms.

Contact: CNTA; [cnta@bellsouth.net](mailto:cnta@bellsouth.net)

### Speaker's Bureau

Description: The Speaker's Bureau identifies experts on topics in nuclear technology so they can prepare and deliver presentations to members of the public that request speakers (e.g. civic groups, clubs, organizations, schools, etc.).

Contact: CNTA; [cnta@bellsouth.net](mailto:cnta@bellsouth.net)

### Education Committee

Description: The goal of the Education Committee is to educate the public on the benefits, uses, and truths of nuclear technology. This is done through several initiatives: "Bringing Nuclear into the Classroom," Nuclear Blitz teach-ins, Lifelong Learning Academy teaching, and awarding the many scholarships and awards to students and teachers. One-time volunteers are needed to help judge the Essay Contest & Educator Grants Program in February/March.

Committee chair and contact: Marissa Reigel; [Marissa.Reigel@srsn.doe.gov](mailto:Marissa.Reigel@srsn.doe.gov)

### Young Professionals Committee

Description: The purpose of the Young Professionals Committee is to recruit and engage young professional members by providing them with mentorship and professional development opportunities as well as raising money to continue to make membership free for those under 40. Their two subcommittees will organize in January and both need help!

Committee chair and contact: Matt McCoy; [Matthew.McCoy@srs.gov](mailto:Matthew.McCoy@srs.gov)

### Membership Committee

Description: The Membership Committee aims to create innovative initiatives to provide and promote value to members, retain current membership, and attract new members.

Committee chair and contact: Lyddie Hansen; [lyddiehansen@bellsouth.net](mailto:lyddiehansen@bellsouth.net)

### Golf Committee

Description: The Golf Committee is responsible planning the annual Charity Golf Tournament. This planning includes soliciting sponsors and raffle items, marketing, and food and beverage. The Annual CNTA Golf Tournament is the biggest fundraiser of the year that brings in on average \$16,000. Volunteers are also needed at the tournament!

Committee chair and contact: Allison Hamilton Molnar; [cnta@bellsouth.net](mailto:cnta@bellsouth.net)

## ANS Names Winter Meeting Award Winners

### MILTON LEVENSON DISTINGUISHED SERVICE AWARD

Kevin O'Kula

To Kevin R. O'Kula, ANS member since 1976 and consulting engineer for Amentum Technical Services, for demonstrated leadership, professionalism, and dedication for more than 38 years in the field of nuclear engineering, supporting all aspects of Department of Energy and Nuclear Regulatory Commission activities.



### E. GAIL DE PLANQUE MEDAL

Kliss McKeel

To Kliss McNeel, director of environment, safety, security, and health at Fluor Idaho, for inspirational vision and outstanding leadership in creating environment, safety, health, and quality and assurance programs integral to the safe and environmentally protective cleanup of national and international nuclear legacy projects.

### LANDIS PUBLIC COMMUNICATION AND EDUCATION AWARD

William Wabbersen Jr.

To William G. Wabbersen Jr., ANS member since 1989 and a nuclear engineer at the National Nuclear Security Administration, for his origination and development of cross-cutting, innovative educational tools to introduce nuclear science concepts to tens of thousands of students of every age through the Interactive Nucleus Display (2010), the ANS Isotope Discovery Kit (2013), and the Isotopes App (2020).




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## SRR Donation to Support Retirees' Resource Center

AIKEN, S.C. (October 22, 2020) — Savannah River Remediation (SRR), the liquid waste contractor at the U.S. Department of Energy's Savannah River Site (SRS), has made a \$5,000 contribution to the SRS Retiree Association (SRSRA).

The donation will provide support for the SRSRA Resource Center, which is operated by retiree volunteers.



CAPTION: From left, SRR President and Project Manager Phil Breidenbach presents a \$5,000 check to David Fauth, SRS Retiree Association Chairman.

The Resource Center provides retirees a place to find help navigating benefits they need, such as health insurance. The SRSRA provides this service to the retirees free of charge.

SRR President and Project Manager Phil Breidenbach said the group is an important source of information for complex issues that sometimes arise with retirees.

"Our retirees have given years of effort to help advance our mission," Breidenbach said. "We want to honor their service and dedication with our support. Retirees are still a part of our team."

SRR is a team of companies led by Amentum with partners Bechtel National, Jacobs, and BWX Technologies, Inc. Critical subcontractors for the contract are Orano, Atkins, and Amentum N&E Technical Services.

## Savannah River National Laboratory, Los Alamos National Laboratory Collaborate to Prepare for NNSA Pit Mission

A Knowledge Transfer Program now in progress will help to ensure that both the Savannah River Site (SRS) and Los Alamos National Laboratory (LANL) are prepared to carry out their parts of the proposed mission – supplying the **required number of plutonium “pits” to support the Nation’s nuclear deterrent**. Like much of the proposed pit mission, this initiative involves collaboration between SRS and LANL. Under this joint program, scientists and engineers from SRS will be temporarily assigned to LANL for two years, where they will work side by side with their counterparts and colleagues, learning everything there is to know about plutonium pit production.

The Savannah River Site has a long history of production, **providing materials used in meeting the Nation’s strategic** deterrence objectives. This program will allow SRS personnel to gain knowledge specific to plutonium pit production from their counterparts at LANL, the acknowledged Plutonium Center of Excellence, and put that knowledge to use at SRS.

The knowledge transfer program is executed by the Savannah River National Laboratory (SRNL), and their employees will participate. SRNL, which is operated by SRS Management and Operations contractor Savannah River Nuclear Solutions (SRNS), is a central partner in the proposed Savannah River Plutonium Processing **Facility (SRPPF) mission, along with SRNS’ NNSA Capital Projects, the SRNS department responsible for** planning and carrying out the proposed mission at SRS.

**“Success at carrying out this important mission relies on hiring a capable workforce, then enabling them to further develop their knowledge,”** said Dr. Vahid Majidi, SRNS Executive Vice President and Director of SRNL. **“The Knowledge Transfer Program is a key part of that development. Not only will the SRNL participants gain** extensive knowledge that they can apply in support of the mission, but they will also return ready to train other **SRS personnel in what they have learned.”** As of November, five SRS Knowledge Transfer personnel had been deployed at LANL, with others beginning their rotation over a period of time, for a total of approximately 20 participants.

Once these personnel complete their rotations at LANL, they will return to SRS and continue their work in the proposed SRPPF Training and Operations Center. They will serve a two-fold mission, directly training personnel that will work in SRPPF as well as training other trainers. Also, when new production requirements emerge, they will be the recognized subject matter experts that will develop the process and production standards for new material.

SRS participants in the program will typically be personnel who have several years of experience under their belt and want to pursue future growth in the fields that support pit production. At the same time, they could be anticipated to have some years before retirement, during which they would be available to offer advice, mentorship, and subject matter expertise when they return to SRS.

To meet national security requirements, NNSA is pursuing a two-pronged approach to the production of plutonium pits—requiring a capability of 50 pits per year at SRS near Aiken, S.C., and a capability of 30 pits per year at LANL in New Mexico. This approach would provide an effective, responsive, and resilient nuclear weapons infrastructure with the flexibility to adapt to shifting requirements.



This digitally-modified group photo was taken in a safe, socially-distant setting, and was edited to appear as a group photo. Shown are five SRS participants, their LANL mentors and leadership from LANL and SRNL.

## Innovative Tank Waste Processing Technology Resumes at Savannah River Site

AIKEN, S.C. (October 15, 2020) — The Department of Energy's Office of Environmental Management (EM) has resumed processing high-level waste (HLW) inside the Tank Closure Cesium Removal (TCCR) module at the Savannah River Site (SRS) following an extended maintenance outage.



The above photo shows the location of TCCR (lower right) in H Tank Farm.

The innovative cesium-removal technology finished processing a batch of radioactive liquid waste last month, moving the TCCR feed tank, Tank 10, closer to final closure. It was the third batch of salt waste processed at SRS since the site began using TCCR in early 2019.

EM and SRS liquid waste contractor Savannah River Remediation (SRR) suspended TCCR in the summer last year when the main transfer pump used to prepare salt waste batches inside Tank 10 reached its end life.

Crews removed that pump from the tank and installed a replacement in March 2020, just before SRS entered essential mission-critical operations status due to the COVID-19 pandemic. Preparations for **TCCR's third batch resumed at the end of May.**

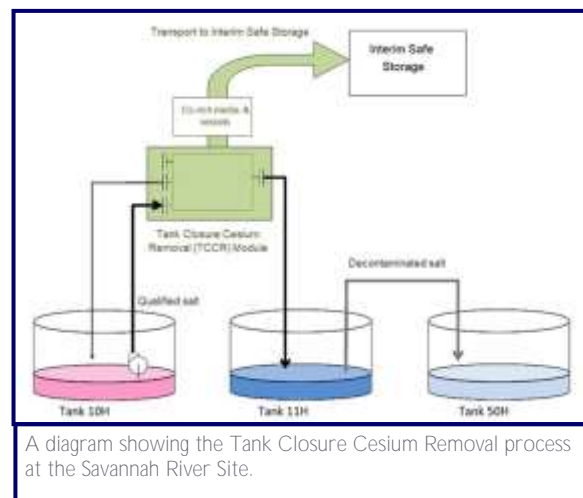
TCCR Senior Project Manager Pen Mayson said that TCCR contributes significantly to the liquid-waste treatment process.

**“Including the 89,430 gallons completed in the third batch, we have now processed and removed cesium from nearly 300,000 gallons of Tank 10 material, bringing the tank a step closer to final closure,”** Mayson said.

TCCR consists of a modular ion exchange process with an engineered resin located adjacent to Tank 10, for the removal of radioactive cesium from salt waste.

**Building on the research and development of EM's Savannah River National Laboratory, the experience of commercial nuclear plant decontamination, and the Fukushima Daiichi accident cleanup, TCCR accelerates waste retrieval and tank closure efforts, and provides a supplemental treatment capability.**

The majority of the salt waste inside the tanks at SRS will be processed through the Salt Waste Processing Facility that is preparing to begin operations. TCCR will supplement that processing to help **accelerate EM's liquid waste mission. Lessons learned have been shared with EM's Hanford Site, which is implementing similar technology in support of providing tank waste feed for the Direct-Feed Low-Activity Waste approach for low-activity tank waste treatment.**



A diagram showing the Tank Closure Cesium Removal process at the Savannah River Site.

SRR President and Project Manager Phil Breidenbach said TCCR is an innovation that has moved salt waste processing into the 21st century, combining first-of-a-kind technology with commercial nuclear cleanup practices and disciplined nuclear operations.

**“These repairs will enable TCCR to be an active part of our ongoing activities to disposition liquid waste and operationally close tanks at SRS,”** Breidenbach said.

*SRR is a team of companies led by Amantum with partners Bechtel National, Jacobs, and BWX Technologies, Inc. Critical subcontractors for the contract are Orano, Atkins, and Amantum N&E Technical Services.*

## Breakthroughs in Additive Manufacturing Could Hasten Advanced Reactor Development

### *BWXT Demonstrates Ability to Additively Manufacture High-Temperature Alloys and Refractory Metals*

(LYNCHBURG, Va. – Nov. 23, 2020) – The development of advanced nuclear reactors is continuing at a rapid pace, but issues still remain working with some specialty materials that are important to these reactors. Teamed with the Oak Ridge National Laboratory, engineers and designers at BWX Technologies, Inc. (BWXT) have developed new additive manufacturing technologies for the design and manufacture of reactor components made from high-temperature alloys and refractory metals.



Advanced reactors are designed to operate at very high temperatures, and the ability to additively manufacture (otherwise known as 3D printing) parts from these alloys and metals can further speed development.

Specifically, BWXT has demonstrated the ability to additively manufacture nickel-based super alloys and refractory-metal-based alloys for use in nuclear components. The company also accomplished component-level qualification, leading to a more efficient certification of nuclear materials configured in complex geometries. BWXT validated this technology during successful execution of an advanced nuclear technology development cost-share program awarded by the U.S. Department of Energy in 2018.

**“We have a uniquely talented group of engineers and designers at BWXT,” said Ken Camplin, president of the Nuclear Services Group. “Their work will make it far easier for advanced reactor developers to move forward in dealing with a number of critical technical challenges inherent in many of these designs.”**

Additive manufacturing technologies will be transformational for the nuclear industry because they enable the creation of shapes not possible with conventional manufacturing techniques. Additionally, verifying the ability to additively manufacture high-temperature super alloys and refractory metals enables designs that possess improved thermal energy management, increased safety margins and accident-tolerant characteristics.

With refractory metal alloy-based core components, it is conceivable that an advanced reactor can reach core exit temperatures of 2,700°F and overall plant efficiencies of approximately 50%.

Additionally, these material developments could have an immediate impact on the current commercial reactor fleet and the goal of achieving an accident tolerant fuel design.

BWXT plans to use its unique design expertise and advanced manufacturing capability to reduce the costs of advanced **nuclear energy systems. Specifically, BWXT’s designs and manufacturing methods will enhance the power output and longevity of a reactor while maintaining affordable costs to manufacture.**

**BWXT expects to reduce manufacturing risk over time as outlined in its recent proposal to the Department of Energy’s Advanced Reactor Development Program (ARDP). According to the Department of Energy, ARDP “will speed the demonstration of advanced reactors through cost-shared partnerships with U.S. industry. By rapidly developing these advanced reactors that hold so much promise, we can expand access to clean energy and take advantage of market opportunities before key infrastructure and supply chain capabilities are lost.”**

#### Forward Looking Statements

*BWXT cautions that this release contains forward-looking statements, including statements relating to additive manufacturing for advanced nuclear reactors; projected demand and interest in additive manufacturing; and the timing and impact of the foregoing. These forward-looking statements involve a number of risks and uncertainties, including, among other things, necessary approvals and demand for advanced nuclear reactors. If one or more of these or other risks materialize, actual results may vary materially from those expressed. For a more complete discussion of these and other risk factors, please see BWXT’s annual report on Form 10-K for the year ended December 31, 2019 and subsequent quarterly reports on Form 10-Q filed with the Securities and Exchange Commission. BWXT cautions not to place undue reliance on these forward-looking statements, which speak only as of the date of this release, and undertakes no obligation to update or revise any forward-looking statement, except to the extent required by applicable law.*

#### About BWXT

At BWX Technologies, Inc. (NYSE: BWXT), we are People Strong, Innovation Driven. Headquartered in Lynchburg, Va., BWXT provides safe and effective nuclear solutions for national security, clean energy, environmental remediation, nuclear medicine and space exploration. With approximately 6,700 employees, BWXT has 12 major operating sites in the U.S. and Canada. In addition, BWXT joint ventures provide management and operations at more than a dozen U.S. Department of Energy and NASA facilities. Follow us on Twitter at @BWXTech and learn more at [www.bwxt.com](http://www.bwxt.com).

## Virtual Field Trips to the Savannah River Site Become Reality

With popular environmental field trips to the Savannah River Site (SRS) on hold due to the COVID-19 pandemic, Savannah River Nuclear Solutions (SRNS) is bringing the site visit experience to the students virtually.

SRNS has hosted local students as part of its Science and Technology Enrichment Program (STEP) for many years. Now, SRNS is conducting virtual field trips to benefit students from elementary school to high school, and the first lesson is called **“Wet Wonders.”** It allows students to study biotic factors that determine the health of a pond by capturing and examining macro invertebrates.

**“This lesson provides a great demonstration of the groundbreaking work of environmental research pioneer Dr. Ruth Patrick who was hired by SRS in the 1950s to do a baseline study of the environmental health of the site prior to construction,”** said Kim Mitchell, SRNS Education Outreach.

Mitchell noted that educators can play a series of videos for their students or request representatives from the University of South Carolina Aiken Ruth Patrick Science Education Center (RPSEC) to visit their classrooms. Teachers or the RPSEC representatives can also provide materials such as water samples containing aquatic creatures. Combined with the videos, **this classroom “virtual field trip” creates an experience comparable to a real-time visit to a pond at SRS.**

Since the in-person field trips were paused earlier this year, Mitchell and her team have been reorganizing nearly all of their outreach programs in an effort to remain relevant to the education community.

**“We’re definitely going virtual within our competitive programs such as Future City, Science Bowl and Science Fair,”** said Mitchell. **“We may use a combination of options related to our science and literacy outreach programs involving teach-ins at area middle schools and the Innovative Teaching Mini-Grants Program for educators.”**

The virtual approach to field trips allows organizers to reach a larger number of students, said Francine Burroughs, SRNS Manager Talent Management and Education Outreach.

**“Even our employee volunteers have been stepping it up, eager to assist in finding new ways to reach students in this new virtual world, particularly regarding our STEM-based (science, technology, engineering and math) programs and events,”** Burroughs said.

STEP provides hands-on STEM opportunities through real-world, issues-oriented investigations that focus on responsible environmental stewardship. Supported by the Department of Energy-Savannah River, SRNS, RPSEC, the National Audubon Society and the U.S. Forest Service, the program is offered to educators and students in the region around SRS.

*Savannah River Nuclear Solutions, a Fluor-led company with Newport News Nuclear and Honeywell, is responsible for the management and operations of the Department of Energy’s Savannah River Site, including the Savannah River National Laboratory, located near Aiken, South Carolina.*

Savannah River Nuclear Solutions (SRNS) is creating a series of videos and learning resources to bring Savannah River Site (SRS) ecology to classrooms in place of traditional field trips to SRS. Beth Eberhard, left, and Kimberly Fickling, both with the University of South Carolina Aiken Ruth Patrick Science Education Center, are shown working on the lesson **“Wet Wonders.”** SRNS employee Brad Bohr is recording the presentation.



## Gov. McMaster, SRNS Announce Major Apprenticeship Commitment

Savannah River Nuclear Solutions (SRNS) recently joined S.C. Gov. Henry McMaster at the State Capitol to announce a regional task force commitment to create hundreds of new registered apprentice opportunities over the next year in the Central Savannah River Area (CSRA).

**“The challenge has been issued for our region to promptly create 300 registered apprenticeships within the South Carolina Technical College System from the counties of Aiken, Barnwell, Allendale, Bamberg, Edgefield and Orangeburg,”** said SRNS President and CEO Stuart MacVean. **“We’re working to do our part, and we have set a goal to facilitate the creation of 100 apprenticeships at SRS by October 2021.”** SRNS is the management and operations contractor at **the Department of Energy’s Savannah River Site** near Aiken.



A regional task force committed to creating hundreds of apprentice opportunities throughout the Central Savannah River Area was announced Friday by S.C. Gov. Henry McMaster (right) and SRNS President and CEO Stuart MacVean.

The CSRA Apprenticeship Task Force is led by Apprenticeship Carolina and Denmark Technical College President Dr. Willie Todd, and includes the Aiken County Public School District Career and Technology Center, Aiken Technical College, Aiken Works, Economic Development Partnership, Lower Savannah Council of Government, Manufacturer’s Council, SRS Community Reuse Organization and the Southern Carolina Alliance.

**“This apprentice effort is a great addition to the outstanding work that Apprenticeship Carolina and the S.C. Technical College System are building upon across our state,”** said Gov. McMaster. **“We know that apprenticeships can help South Carolina create a stronger workforce development pipeline that can help create career opportunities for our people and encourage economic growth across the entire state.”**

Registered apprenticeship programs traditionally support careers related to manufacturing and construction but can also include a variety of jobs found at SRS including production operators, radiation protection personnel, IT professionals and aspiring engineers.

**“Apprentices become highly skilled individuals possessing the benefits of scalable wages, on-the-job training and classroom learning,”** said MacVean. **“This is one of the innovative ways SRNS is building the nuclear workforce of the future while providing opportunities for students in the CSRA.”**

SRNS recently experienced success with a pilot apprenticeship program for production operators in association with Aiken Technical College. This program began with 10 individuals obtaining the basic qualifications required for an SRNS production operator – including conduct of operations principles and radiation worker training. SRNS made full-time job offers to six of the participants. A second group of candidates have been interviewed to fill 14 openings in the SRNS apprenticeship initiative based on the success of the pilot program.

More than \$11 million in federal grants from the U.S. Department of Labor to expand registered apprenticeship programs in South Carolina is also available. This funding will be used to further ensure the continued success of the SRNS apprenticeship program, not just at SRS, but across the CSRA.

The registered apprenticeship program at SRNS is based on a partnership between several local organizations including **Apprenticeship Carolina™ (AC)**. **AC** is a collaboration between Ready South Carolina and the South Carolina Technical College System and is dedicated to furthering economic and workforce development. With the guidance of AC as well as the Lower Savannah Council of Governments, SRNS apprenticeships will be registered both with the state and nationally.

*Savannah River Nuclear Solutions, a Fluor-led company with Newport News Nuclear and Honeywell, is responsible for the management and operations of the Department of Energy’s Savannah River Site, including the Savannah River National Laboratory, located near Aiken, South Carolina.*



## Georgia Power receives first nuclear fuel shipment for Vogtle Unit 3

Represents the first nuclear fuel delivery for the newly-designed reactor in the U.S.

Signifies a major step for the nuclear expansion project towards operations

Unit 3 construction is now approximately 96% complete

ATLANTA, Dec. 9, 2020 /PRNewswire/ -- Georgia Power has received the first nuclear fuel shipment for Vogtle Unit 3, representing the first nuclear fuel shipment for this newly-designed AP1000 reactor in the U.S. The milestone marks a major step for the Vogtle 3 & 4 nuclear expansion project towards operations and providing customers with a carbon-free energy source that is expected to put downward pressure on rates for decades to come.

"Since the start, the Vogtle expansion project has been an investment in our energy future. Today, as we receive our first nuclear fuel shipment, we remain committed to realizing the benefits this project will provide not only to our customers, but also our state and our country," said Paul Bowers, chairman and CEO of Georgia Power. "Achieving this historic milestone brings us closer to fuel load expected in April 2021, and, once online, these new nuclear units will provide clean, carbon-free energy for the next 60 to 80 years."

In order to receive nuclear fuel, construction of specific areas of Unit 3 had to be completed and inspected, ensuring critical infrastructure, such as the fuel vault and spent fuel pool, meet construction quality and design requirements. With site construction turning over the fuel handling area of Vogtle Unit 3 to operations, the Vogtle 3 & 4 site implemented specific and comprehensive policies, procedures and security measures to safely receive, handle and store the nuclear fuel.

With the receipt of the first nuclear fuel assemblies, the Vogtle 3 & 4 project remains focused on one of the last major milestones ahead for Unit 3, hot functional testing. This series of tests is the last critical step before fuel load and ultimately in-service operation.

### Carbon-free energy source

The new Vogtle units are an essential part of Georgia Power's commitment to deliver safe, clean, reliable and affordable energy for customers and play a significant role in supporting Southern Company's goal of net-zero carbon emissions by 2050.

Once operating, the two new units at Plant Vogtle will be able to power more than 500,000 homes and businesses. A diverse fuel mix, including nuclear, is also essential to maintaining a reliable and affordable energy infrastructure that attracts new investment, supports economic growth and creates jobs.

### Nuclear fuel process

One nuclear fuel pellet, roughly the size of a pencil eraser, provides as much energy as one ton of coal or nearly 150 gallons of oil. The nuclear fuel pellets are enclosed in nuclear fuel rods, which are then part of nuclear fuel assemblies. Consisting of 157 fuel assemblies with each measuring 14 feet tall, the fuel will be loaded into the reactor vessel to support startup once the reactor begins operating. After the initial fueling, approximately one third of the total fuel assemblies will be replaced during each refueling outage after the units begin operating, similar to the process used at existing Vogtle Units 1 & 2.

Earlier this year, the Vogtle 3 & 4 project team successfully completed the pre-startup review process conducted by the World Association of Nuclear Operators (WANO), which assessed the Vogtle 3 & 4 nuclear expansion project's readiness to operate the new AP1000 reactors with safety and quality as the primary focus.

### 2020 Milestones Achieved

Full list of milestones available at: <https://southerncompany.mediaroom.com/2020-12-09-Georgia-Power-receives-first-nuclear-fuel-shipment-for-Vogtle-Unit-3>

### Photos Highlight Progress

Follow the progress being made at the site of the nation's first new nuclear units in more than 30 years through the [Plant Vogtle 3 & 4 Online Photo Gallery](#) and [Georgia Power's YouTube channel](#).

### About Georgia Power

Georgia Power is the largest electric subsidiary of Southern Company (NYSE: SO), America's premier energy company. Value, Reliability, Customer Service and Stewardship are the cornerstones of the company's promise to 2.6 million customers in all but four of Georgia's 159 counties. Committed to delivering clean, safe, reliable and affordable energy at rates below the national average, Georgia Power maintains a diverse, innovative generation mix that includes nuclear, coal and natural gas, as well as renewables such as solar, hydroelectric and wind. Georgia Power focuses on delivering world-class service to its customers every day and the company is recognized by J.D. Power as an industry leader in customer satisfaction. For more information, visit [www.GeorgiaPower.com](http://www.GeorgiaPower.com) and connect with the company on Facebook ([Facebook.com/GeorgiaPower](https://www.facebook.com/GeorgiaPower)), Twitter ([Twitter.com/GeorgiaPower](https://twitter.com/GeorgiaPower)) and Instagram ([Instagram.com/ga\\_power](https://www.instagram.com/ga_power)).



### Cautionary Note Regarding Forward-Looking Statements

Certain information contained in this release is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning the expected schedule for completion of construction and start-up of Plant Vogtle Units 3 and 4, including expected timing of fuel load, expected job creation and rate impacts, and carbon emissions reduction goals. Georgia Power cautions that there are certain factors that can cause actual results to differ materially from the forward-looking information that has been provided. The reader is cautioned not to put undue reliance on this forward-looking information, which is not a guarantee of future performance and is subject to a number of uncertainties and other factors, many of which are outside the control of Georgia Power; accordingly, there can be no assurance that such suggested results will be realized. The following factors, in addition to those discussed in Georgia Power's Annual Report on Form 10-K for the year ended December 31, 2019, Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020, June 30, 2020, and September 30, 2020, and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: the potential effects of the continued COVID-19 pandemic, including, but not limited to, extended disruptions to supply chains and further reduced labor availability and productivity, which could have a variety of adverse impacts, including a negative impact on the ability to develop, construct, and operate facilities, including, but not limited to, Plant Vogtle Units 3 and 4; the ability to control costs and avoid cost and schedule overruns during the development, construction, and operation of facilities or other projects, including Plant Vogtle Units 3 and 4, which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale, and including changes in labor costs, availability and productivity, challenges with management of contractors or vendors, subcontractor performance, adverse weather conditions, shortages, delays, increased costs, or inconsistent quality of equipment, materials, and labor; contractor or supplier delay, delays due to judicial or regulatory action, nonperformance under construction, operating, or other agreements, operational readiness, including specialized operator training and required site safety programs, engineering or design problems, design and other licensing-based compliance matters, including for nuclear units, the timely submission by Southern Nuclear of the Inspections, Tests, Analyses, and Acceptance Criteria documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel, challenges with start-up activities, including major equipment failure, or system integration, and/or operational performance; the ability to overcome or mitigate the current challenges at Plant Vogtle Units 3 and 4, including, but not limited to, those related to COVID-19, that could further impact the cost and schedule for the project; legal proceedings and regulatory approvals and actions related to construction projects, such as Plant Vogtle Units 3 and 4, including Public Service Commission approvals and NRC actions; under certain specified circumstances, a decision by holders of more than 10% of the ownership interests of Plant Vogtle Units 3 and 4 not to proceed with construction and the ability of other Vogtle owners to tender a portion of their ownership interests to Georgia Power following certain construction cost increases; the ability to construct facilities in accordance with the requirements of permits and licenses (including satisfaction of NRC requirements), to satisfy any environmental performance standards and the requirements of tax credits and other incentives, and to integrate facilities into the Southern Company system upon completion of construction; the inherent risks involved in operating and constructing nuclear generating facilities; the ability of counterparties of Georgia Power to make payments as and when due and to perform as required; the direct or indirect effect on Georgia Power's business resulting from cyber intrusion or physical attack and the threat of physical attacks; catastrophic events such as fires, earthquakes, explosions, floods, tornadoes, hurricanes and other storms, droughts, pandemic health events or other similar occurrences; and the direct or indirect effects on Georgia Power's business resulting from incidents affecting the U.S. electric grid or operation of generating or storage resources. Georgia Power expressly disclaims any obligation to update any forward-looking information.

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SAVANNAH RIVER NUCLEAR SOLUTIONS  
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## GOLD

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# Thank you to our Members Plus!

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Wayne Rickman  
Steve Sheetz  
Clint Wolfe  
Virginia Wolfe

## Mission of CNTA

*Citizens for Nuclear Technology Awareness, Inc.*, is an education and advocacy group promoting the safe and effective use of nuclear power, nuclear research and nuclear medicine.

We provide education, networking, and a voice of understanding from a technical perspective in a world often influenced by *inaccurate* and unwarranted fear.

CNTA membership encompasses individuals, families, and businesses who support the use of nuclear science and technology for many applications, including: energy, national security, nuclear medicine and diagnostics, and industrial applications.

### BOARD OF DIRECTORS

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### MEMBERSHIP INFORMATION

#### BUSINESS MEMBERSHIP OPTIONS

Platinum: \$10,000 or more  
 Gold: \$5,000—\$9,999  
 Silver: \$2,500—\$4,999  
 Bronze: \$1,000—\$2,4999  
 Business Member: \$500 to \$999

#### INDIVIDUAL MEMBERSHIP OPTIONS

Member Plus— \$250.00 or more  
 Benefactor—\$125.00  
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 Sustaining—\$35.00  
 Young Professional — Free for 1 year

Membership Information is available online at:

<http://cntaware.org/join-us/>

All membership levels include invitations to breakfasts/dinners, other events, quarterly newsletters and opinion letters/editorials. Benefactor and Member Plus also receive one free private reception ticket and one free Teller Lecture banquet ticket when dues are current.

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All Virtual Events are available on our website and our YouTube Page:  
<https://www.youtube.com/user/CNTAware>



## HOW YOU CAN HELP

CNTA as a charitable non-profit organization can **ALWAYS** use help.

Opportunities include:

- Donate Items for Raffles/Auctions
  - **Donate to Our “Help CNTA, Help the Community” Gift Card Program!**
- Donate to CNTA as a charitable non-profit (<https://cntaware.org/about-us/>)
- Volunteer your time
  - Get involved with a CNTA Committee (descriptions on pg. 10)
  - Help the CNTA Education Committee revamp our education outreach to comply with social distancing!
  - Volunteer to help in our Office (there is still work to be done there!)
  - Be an event-specific volunteer
  - Be an educational committee contest judge!
- Sponsor a 2021 Event or Education Outreach!

For information email Allison at [office@cntaware.org](mailto:office@cntaware.org)

## CNTA CALENDAR OF EVENTS

January 31, 2021– Educator Grant Applications due

February 28, 2021– Essay Contest Applications due

March 3, 10, & 17, 2021– “SRS and the Environment” Lifelong Learning Class at USCA.

May 7, 2021– 19th Annual CNTA Charity Golf Tournament

October 2021– Young Professionals Fundraiser & 30th Annual Teller Lecture & Banquet

The Members’ Mixer, CNTA’s 30th Anniversary events, Up & Atoms, Tap into Nuclears and more are on the agenda. We are planning for virtual only in the first quarter of 2021, but hope to be back in person sometime next year

**Keep an eye on our website’s event calendar and be checking your email for event updates!**

## TIME TO RENEW FOR 2021!!

CNTA’s membership renews for 1 year from either your last renewal or when you were set to expire. This means you can take care of it NOW and be set for another FULL year regardless of when you last renewed!! The membership form and virtual payment options are available online at: <https://cntaware.org/individual-membership/>

**Make sure you’re set for 2021 NEVER miss out on CNTA NEWS!!**