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**FOR IMMEDIATE RELEASE**

## **Savannah River National Laboratory announces license agreement with Greenway Energy**

*Hydrogen technology company licenses hydrogen isotope separation technology to build a system to be used in a nucleotide radiography application by a commercial laboratory*

AIKEN, S.C. (August 28, 2018) – Savannah River National Laboratory has licensed its hydrogen isotope separation technology to Greenway Energy, LLC, an innovative hydrogen technologies company.

The license is for a system known as Thermal Cycling Absorption Process (TCAP), which is used to separate hydrogen isotopes -- protium, deuterium and tritium -- using a continuous method based on palladium gas chromatography. The TCAP system was invented in 1980 by Savannah River National Laboratory to support its national security mission. Since its introduction, the TCAP system has been refined to feature a significantly smaller size, consume less energy, and improve environmental safety.

“TCAP is an excellent example of the type of practical, applied research that Savannah River National Laboratory conducts on behalf of the nation,” said Dr. Vahid Majidi, Director of the National Laboratory. “The transfer of this technology opens up the possibility of additional commercial applications and improved availability to our customers.”

Through the license agreement, Greenway will be able to economically manufacture a TCAP system for use of a commercial laboratory in a nucleotide radiography system. This type of radiography is a proven technique for the nondestructive testing of manufactured components in the aerospace, energy and defense sectors.

“Licensing TCAP technologies opens a variety of unique solutions for imaging as well as purification of hydrogen isotopes used in commercial processes,” said Scott Greenway, president of Greenway Energy. “We are actively working with clients and industry to develop solutions around this technology. Greenway Energy sees SRNL as a partner for further technology development that will drive innovation in this area, and allow for more advanced application in the future.”

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**Savannah River National Laboratory** is a multi-program national laboratory for the U.S. Department of Energy Office of Environmental Management. SRNL puts science to work providing practical, cost-effective solutions for the nation's environmental, nuclear security, energy and manufacturing challenges.

**Greenway Energy, LLC (GWE)** specializes in engineering novel solutions for hydrogen technologies, clean energy and energy storage technologies. GWE has expertise in chemical engineering with specialties in electrochemical engineering, electrocatalyst synthesis, multi-physics modeling, techno-economic analysis, high temperature systems and nuclear materials. GWE partners with national laboratories, universities and other clean energy companies to engineer solutions for real-world application.

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**PHOTO CAPTION:** Savannah River National Laboratory Director Dr. Vahid Majidi and Greenway Energy President Scott Greenway, pose after signing a licensing agreement allowing Greenway Energy to use the lab's Thermal Cycling Absorption Process hydrogen isotope separation technology for use in a nucleotide radiography system.

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