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For Immediate Release

ABD is a G-O! SRS's Operations Received Approval for Accelerated Basin De-inventory Mission, saving time and money

AIKEN, S.C. (July 12, 2022) - The Savannah River Site (SRS) received approval from the Department of Energy to proceed with a new approach to spent nuclear fuel (SNF) disposition that will result in a lifecycle cost reduction of over \$4 billion dollars and represents a more than 20-year acceleration over the current approach.

Since 1995, the H Canyon chemical separations facility has been used to dissolve SNF from SRS's L Area Disassembly Basin, an underwater facility that safely receives and stores SNF from foreign and domestic research reactors. After dissolution, H Canyon would use complex chemical processes to purify and blend the resulting highly enriched uranium (HEU) with natural uranium to produce low enriched uranium (LEU). The LEU was then used in commercial power reactors to make electricity. This approach made the HEU non-proliferable, or no longer usable for nuclear weapons.

The newly approved approach, called Accelerated Basin De-inventory (ABD), will use H Canyon to dissolve the SNF and then, instead of processing further into LEU, send it through the Site's liquid waste program to be vitrified and safely stored onsite until a federal repository is identified.

"There are so many reasons that ABD is a better path forward," said Eloy Saldivar, the ABD Program Manager for SRS management and operations contractor Savannah River Nuclear Solutions. "H Canyon is a complex, unique resource and is the only operating production-scale nuclear radiochemical separations facility in the US. But the facility is nearly 70 years old and its expensive to maintain and operate. Add that to the fact that L Basin is nearing its storage capacity, and there are other cheaper sources of fuel for commercial power reactors, so our LEU is no longer needed. ABD is just a cheaper, faster and simpler approach to dispositioning SNF."

ABD allows certain H Canyon systems to be made inactive, saving processing and associated upkeep and maintenance costs. It also allows SRS to disposition the more than 3,000 SNF

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bundles in L Basin by 2033, when the current operating approach would have taken until the year 2060.

"The Department of Energy and its contractors are committed to reducing costs, completing projects more quickly and safely, optimizing operations, and engaging employees in a highly effective production environment," said SRS Manager for DOE, Mike Budney. "The ABD solution to improve the Savannah River Site cleanup mission embodies this approach."



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