SRS Tritium Projects Complete Banner Year

AIKEN, S.C. (Jan. 18, 2022) – To continue successfully serving the National Nuclear Security Administration’s (NNSA) missions at the Savannah River Site (SRS), Savannah River Nuclear Solutions (SRNS) is carrying out a number of construction projects. Much has been said about the large NNSA capital projects currently underway; however, there are numerous lesser-known SRNS construction projects that are also vital to ensuring that SRS is able to continue fulfilling these important national needs, especially in the Savannah River Tritium Enterprise (SRTE).

“We refer to these as ‘small projects,’ but that may give the wrong impression. That term refers to anything that does not require a separate line item in the congressional budget, which means any project with a total estimated cost less than $20 million. That includes some really substantial projects,” said Allen Neiling, SRNS Director, Savannah River Tritium Facility Projects. These represent many different ways in which SRNS is modernizing SRTE to keep it safely and efficiently carrying out its national security missions.

2021 was a banner year for SRTE’s “small” projects, with SRNS achieving several highly anticipated milestones and meeting objectives for spending. Those milestones included the installation and connection of the new diesel generator. The diesel generator is part of the “bridging” strategy to maintain H Area Old Manufacturing (HAOM) until the new

New exhaust stack erected as part of the multiphase project to provide new exhaust ventilation for the Savannah River Tritium Enterprise’s Materials Testing Facility lab
Tritium Finishing Facility (one of SRNS’ large NNSA capital projects, now in design and planning) is completed and comes online to replace it. It provides emergency power to HAOM in the event Site power is lost, to maintain the ventilation that prevents radiological release from the facility.

The installation project installed the new diesel generator foundation, diesel generator and enclosure, fuel tank, and associated electrical commodities, including the switchgear. The connection project involved the tie-in of the electrical power from HAOM to the diesel generator to include installation of cable tray and supports, conduit, cable, and terminations. Two significant electrical outages to the facility were required to tie in the electrical power to the diesel.

“COVID-19 certainly impacted our schedule for completing the generator replacement,” Neiling said, “but in the end we were able to successfully complete the work and turn the new generator over to Operations ahead of the negotiated milestone extension.”

Other projects that are part of the formal bridging strategy for HAOM will help enable the aging facility to continue safe operations. One of these is the replacement of four 60-year-old motor control centers (MCCs), which kicked off in 2021, mobilizing seven weeks ahead of the milestone due date. The fan control cabinet was fabricated and the four MCCs were received in 2021. Like several of the projects in SRTE, the transfers to the new MCCs have to be scheduled to take place during planned outages, so they can be accomplished without disrupting SRTE’s operations.

A number of “small” projects serve to modernize other SRTE facilities. Among the most significant of these is the replacement of about 30 outdated oxygen monitors in H Area New Manufacturing facility gloveboxes. In 2021, SRNS replaced five, the most ever done in a single year. Like the MCC work, this must be scheduled to be performed without impacting operations.

A large, multiphase project to provide new exhaust ventilation for SRTE’s Materials Testing