

Award Fee Determination Scorecard

Contractor: Savannah River Nuclear Solutions

Contract: Management and Operations

Contract Number: DE-AC09-08SR22470

Award Period: October 1, 2014 – September 30, 2015

Basis of Evaluation: Performance and Evaluation Plan (PEMP)

This is a Cost Plus Award Fee contract as defined by federal acquisition regulations (FAR). Fee is made available for the completion of explicit work results, such as completing a task on time, or for implicit performance in areas of cost, schedule/timeliness, quality and business relations. Fee may be earned based on an annual evaluation of contract performance. Total available fee for each contract year is identified in the contract. Fee-bearing work may be assigned as an award fee component for subjectively measured performance requirements or a performance based incentive fee component for objectively measured requirements.

Total Fee Available:

Total fee available for this past year was \$45,730,000.00. The contractor earned \$37,853,814.00, which is 82 percent of the total available. Fee-bearing work is funded and evaluated separately by U.S. Department of Energy (DOE) Environmental Management (EM) and National Nuclear Security Administration (NNSA) programs. The determination of earned fee is also made by each program.

Program	Fee available	Fee earned	Percent
EM	27,239,000.00	24,124,245.00	88%
NNSA	18,491,000.00	13,729,569.00	74%
Total	45,730,000.00	\$37,853,814.00	82%

Award Fee Adjectival Rating:

The DOE Savannah River Operations Office (DOE-SR) performs monthly surveys of federal senior site management who report observations in monthly fee board meetings. These areas are given a subjectively measured adjectival rating in accordance with FAR. For Fiscal Year (FY) 2015, the contractor received a composite performance rating of 82 percent based on feedback from the monthly surveys. As defined by the FAR, this performance rating is very good. This rating means the contractor exceeded many of the significant award fee criteria and met performance requirements of the contract.

Performance Based Incentive Fee:

Contractor work must be planned, funded and approved for each fiscal year, resulting in an approved baseline. The baseline work implements strategic decisions relative to agency and

program initiatives. An additional element of strategy includes the decision by federal management to apply a portion of available fee to certain work, or aspects of work that may be interdependent on other work. This fee-bearing work must benefit the agency and/or program goals or strategic initiatives. Fee-bearing work is identified at the beginning of the fiscal year and managed through the baseline Earned Value Management (EVM) and Work Authorization (WA) systems.

Significant Achievements:

- The Department of Energy Voluntary Protection Program (VPP) recognized SRNS as a STAR participant for continued excellence in safety programs, performance, and culture at SRS. The recertification process for DOE's highest safety honor takes place every three years and analyzes DOE contractor safety performance, work activities, employee engagement, and overall safety culture.
- H-Canyon started up the Head End process and completed four dissolver batches of Material Test Reactor spent nuclear fuel as well as staged 40 bundles of spent nuclear fuel in newly installed bundle storage racks, ahead of schedule which ensures feedstock for FY 2016. This process had not been operated in several years. For spent fuels, the Head End process is necessary to remove solids that can interfere with separation in the follow-on solvent extraction processes.
- L-Area completed the shielded transfer modification project and declared readiness to receive National Research Universal (NRU)/ National Research Experimental (NRX) fuel in advance of the original scheduled date. Although there were issues with subcontract supplied components, SRNS reworked the components of concern and maintained the schedule to ensure the first cask was received and processed prior to the end of FY 2015.
- K-Area completed nine Destructive Examinations as part of the 3013 Surveillance Program, and completed 20 plutonium (Pu) verifications. This activity maximized use of the K-Area Interim Surveillance (KIS) glovebox. K-Area also completed surveillance activities on 10 9975 containers to support Engineering evaluations to extend the service life of those containers for storing content in the Material Storage Area.
- SRNS Days Away, Restricted, or Transfer (DART) and Total Recordable Case (TRC) rates were below the site goals for the FY 2015.
- SRNL continues to attract strategic partnership projects and serves the EM program with excellent support. DOE noted SRNL has been fully engaged and extremely helpful with the Nuclear Chemical Manufacturing Collaborative Facility (NCMC) Project. Additionally, SRNL provided excellent support to the Minority Serving Institutions Partnership Program (MSIPP).

Significant Deficiencies:

- HB-Line personnel violated procedures in September 2015, by placing Pu samples in an unapproved storage container. This event precipitated the SRNS Site Wide Operational Pause due to the seriousness of the event, and while necessary, has negatively impacted mission work.
- HB-Line lost Tank NT-51 agitation during a power interruption, resulting in a criticality control violation in February 2015. SRNS was unable to detect agitation by the slight level fluctuation in the tank as indicated by the liquid level recorder. SRNS subsequently incorporated positive agitation indication and other corrective actions to prevent

reoccurrence. (Reference DOE Assessment #2015-SA-02507, SRNS Recovery Plan (Document #SRNS-N00000-2015-00053) and follow-up work release letters from DOE (NMOD-15-0015, 0016, 0017, 0019, 0022, and 0029)

- The Readiness Assessments (RA) for 235-F Deactivation Basis for Interim Operation (DBIO), 2nd Uranium Cycle, (further purifies Uranium in preparation for down-blending to meet Low Enriched Uranium specifications for Tennessee Valley Authority Reactors), and Headend (described above), identified Conduct of Operations weaknesses and did not meet DOE expectations. As a result, DOE issued a letter to SRNS expressing concern and requesting a corrective action plan. (Reference letters NMOD-15-1000 (July 10, 2015) and NMOD-15-0031(Aug.7,2015)
- SRNL/SRNS authorized the packaging of foreign special nuclear materials (SNM) that would have violated the 9975 shipping package Safety Analysis Report for Packaging (SARP) and the K-Area Documented Safety Analysis (DSA). This required additional unplanned work in K-Area to calculate Hydrogen generation rates and modify the DSA to accept packages so the foreign entities would not have to re-open and re-package.
- SRNS Site Utilities Division (SUD) coordination with Tritium was inadequate on separate occasions resulting in additional costs and risking delivery schedules. Damage to the Steam Control Valve resulted in irreparable damaged to two cooling coils. Several months were needed to procure and install new coils and during this period, redundant cooling capability was not available which induced unneeded complexity and risk to ongoing production activities. The loss of electrical resulted in damage to several components across the tritium facilities. The plant has not yet fully recovered which coupled with the Pause induced significant risk to maintaining production capacity.

In the area of Emergency Management, over the past year, there have been issues with SRNS Emergency Management planning, resources and conduct of drills. DOE reviews and audits in FY 2015 and various drill scenarios have demonstrated that SRNS did not meet DOE expectations.

- Repeated performance deficiencies have been noted involving Radiological Protection during training drills along with issues regarding how the Fire Department conducts a scene size up and with the establishment of their Command Post. Examples of this occurred in recent SRNL and 235 Facility drills.
- SRNS has failed to conduct effectiveness reviews for issues that re-occur, such as the placement of fire department resources during drills, which resulted in the fire department personnel potentially being in the plume of a simulated radiological release.
- Numerous performance issues have been identified involving Controllers and Role Players, which greatly impacted the results of drills and exercises.

The HB-Line event(s) leading to the operational pause of all SRNS site-wide activities in September 2015 were below DOE performance expectations for nuclear operations. However, implementation of the operational pause was a positive action, which led to a comprehensive review of site-wide procedures and an engagement with the SRNS workforce on the importance of effective Conduct of Operations (procedure review and compliance) in all site activities. The Department believes that the operational pause will strengthen the SRNS safety culture for the future.