National Nuclear Security Administration

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FY 2013 PER

Savannah River Nuclear Solutions, LLC Performance Evaluation Report

Savannah River Field Office
Performance Period:
October 2012 – September 2013

Signature

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Executive Summary

The work performed for Tritium and the Office of Fissile Materials Disposition at the Savannah River Site is conducted by Savannah River Nuclear Solutions, LLC (SRNS) under Management and Operating Contract #DE-AC09-08SR22470. This is a Department of Energy (DOE) Office of Environmental Management (EM) contract under which NNSA-funded and directed work is performed. For FY13, SRNS was under an Award Fee format with all fee "at-risk." This report covers the October 1, 2012 – September 30, 2013 incentive-based performance period. Detailed evaluation supporting information is containied in the Quarterly Evaluation and monthly feedback reports.

The Savannah River Field Office (SRFO) feedback process utilizes the *Actuate BIRT* software package to track and document contractor performance, as well as the SRFO evaluation of that performance, on a continuous basis. Monthly feedback meetings were held with SRNS throughout the performance period where SRNS was apprised of performance traits, both favorable and unfavorable, in each evaluated area. Where performance was rated as not meeting expectations, SRNS was informed of the deficiencies and the impacts to the program. Corrective actions were then planned, executed and discussed at the next monthly performance meeting, as well as during routine senior leadership engagements. Monthly reports were transmitted to SRNS and program offices.

FY13 represented a significant change in both the Corporate Performance Evaluation Plan (CPEP) format and process. The NNSA and each site contracted operator opted to employ a Strategic CPEP with 100% of "at-risk" fee being subjective. The Strategic CPEP consists of five (5) Performance Objectives (POs) which are standard across the Nuclear Security Enterprise (NSE), and supplemented with Site Specific Objectives (SSOs). Fee is distributed among the five (5) POs as specified in the CPEP.

Performance Objective - 1: Nuclear Weapons Mission

SRNS's performance for PO-1 **exceeded expectations** with respect to cost, schedule, and technical performance.

All reservoir shipments (100%) were completed on schedule with no customer issues, which was a performance improvement from recent years. SRNS exhibited operational flexibility with the ability to meet all LLC shipments despite an average of three (3) schedule changes each month. SRNS coordinated with the NNSA-HQ Tritium Readiness Program Manager and conducted a tritium extraction with severely constrained operational funding. This required an extraordinary effort on the SRNS's behalf to shift near term priorities and as a result, eliminated the potential additional costs of an Operational Readiness Review had they not exercised the Tritium Extraction Facility technical and personnel capabilities with an extraction event.

SRNS worked closely with the Design Agencies and customers to ensure the Automated Reservoir Management System (ARMS) II upgrades were completed with minimal impact. The implementation of this new enterprise capability is extremely significant. The original ARMS system was a FORTRAN based software program that was outdated and posed a significant risk throughout the NSE. The ARMS II program is a modern platform and provides more reliability to system operation and

capability. This was a one-of-a-kind upgrade that could have resulted in significant programmatic and mission delays if major issues had arisen during the program change over. The rapid restoration of the system was the culmination of a multi-year effort of planning and design efforts to achieve the desired end product. Proper planning resulted in the outage being reduced from an original estimate of 3 months to approximately 4 weeks.

All required activities for the reservoir surveillance program were completed with no issues. The number of completed surveillance activities exceeded established goals for the FY. SRNS was able to meet all level two milestones within budget and within schedule despite significant budget challenges and uncertainties throughout the year. This was accomplished against the backdrop of a a site-wide corporate furlough, which was successfully managed by SRNS.

Overall performance in this Performance Objective is rated as **Excellent**.

Performance Objective - 2: Broader National Security Mission

While the SRNS performance for this PO was overall rated as **satisfactory** due to support of the Broader National Security Mission, there were areas of successes and shortcomings; the performance trend under this objective and supporting leadership efforts, is an area of continuing concern.

SRNS was tasked on the Waste Solidification Building Capital Line Item Project, to complete construction and initiate startup testing in accordance with approved cost & schedule baselines and related work scope as defined in the FY13 Work Authorization & Execution Plan (WAEP). The contractor exceeded its baseline schedule (a 10-month slip for mechanical completion over a 10-month period) and its schedule contingency resulting in an unfavorable $15M cost impact. This is a continuing trend of unsatisfactory performance for this project.

The completion of readiness activities and start-up in HB-Line (an EM owned, SRNS operated facility) for production of Aqueous Polishing (AP) grade plutonium oxide encountered significant delays during FY13. SRNS completed significant facility readiness activities, including extensive upgrades to the HB-Line Facility Safety Basis, completion of more than 250 procedures, major software upgrades, equipment and integrated demonstration runs and operator training/qualifications. During FY13, SRNS improved the overall focus for achieving long term success in the AFS-2 campaign; however this effort failed to result in the desired end state, the production of acceptable plutonium oxide feed material per the program's schedule and SRNS contractual requirements. Therefore, this aspect of Performance Objective 2 was unsatisfactory.

SRNS supported GTRI's Molybdenum-99 (Mo-99) Program and was extremely responsive to program requirements for both technical reviews and work package status meetings. While SRNS met some of its budget profile goals, it failed to meet the overall carryover goal due to internal misunderstandings and poor funds management. However, SRNS overcame significant technical obstacles to remain on track to complete two plutonium shipments.

Overall performance in this Performance Objective is rated as **Satisfactory**.

Performance Objective - 3: Science, Technology & Engineering

SRNS has **significantly exceeded** the performance expectations in this area.

SRNS continued to develop new technologies and to progress the maturation of existing technologies which can be deployed within the NNSA Complex, as well as in commercial applications.

The Savannah River Tritium Enterprise (SRTE) FY13 PDRD Program was effective in meeting overall program intent for advancing the maturation of production technology essential to the long-term viability of the SRTE Missions. Project activities funded in fiscal year 2013 generally focused on replacement of manufacturing technologies, the development of innovative agile manufacturing techniques and processes supporting Gas Transfer Systems, training, recruitment, and retention of essential personnel.

Overall performance in this Performance Objective is rated as **Excellent.**

Performance Objective - 4: Security, Infrastructure, Environmental Stewardship & Institutional Management

FY13 presented numerous budget challenges throughout the year which included operating under a federal government Continuing Resolution (CR) and mid-year funding reductions due to budget sequestration enactment. SRNS was responsive to budget changes throughout the year and was still able to meet special NNSA HQ requests to complete activities by exercising sound business practices and adapting management priorities.

Facilities were maintained in a high state of readiness throughout the year, with minimal downtime, which ensured that all mission deliverables were provided on or ahead of schedule. SRNS instituted a robust self-identification of issues program from every level of the organization, which also included the self-reporting of two Technical Safety Requirements (TSR) violations. SRNS took aggressive and timely action to work effective resolution to all issues identified.

SRNS managed an effective and efficient S&S program in FY13 at a level which exceeded expectations. SRNS accomplished all of the Performance Evaluation Criteria on schedule and under budget. Lessons learned from the Y-12 security incident were deployed to enhance the security posture. SRNS continued to manage to keep the E3S security system in operation. This is a major challenge as the system is well beyond its expected life, with very limited logistical support.

SRNS effectively managed the quality assurance program performance in accordance with Federal, DOE and NNSA quality requirements/directives and provided quality products to customers. Overall, quality metrics continue to show that SRNS is providing product to the customer that meets all requirements. The Cost of Non-Conformance has continued to decline over the past several years and was < 0.2% in FY13. This indicates that SRNS is providing final products with minimal rework required. There were no returns or rejects from receivers in FY 13.

There were no customer issues from a quality standpoint and metrics showed significant improvements from prior years. All activities were conducted in a safe and secure manner as

evidenced by several NNSA HQ reviews conducted throughout the year, as well as management metrics. Also, all this was performed at a time when the Office of Environmental Management (EM) budget at SRS was declining and SRNS was required to ensure that NNSA interests were not impacted due to reductions in landlord services.

Overall performance in this Performance Objective is rated as **Very Good**.

Performance Objective - 5: Contractor Leadership

SRNS Contractor Leadership performance was mixed with several examples of both the very positive and two glaring unsatisfactory efforts.

On the very positive side, SRNS increased its engagement with the NSE, other federal agencies, and the international community, providing leadership that was beneficial to NNSA. The high points of SRNS' performance include partnering with the Design Agencies (DA) to solve technical issues, to integrate the R&D associated with reservoir designs and LEPs, to reconstitute capabilities and to reduce risk associated with reservoir program activities. Additional high points were the partnering efforts with other production activities to solve technical issues, create efficiencies in production activities, quality improvements to reservoir activities and to share human resources that develop the workforce and work environments needed as the weapons complex environment continues to change. SRNS demonstrated a clear willingness, as a corporate partner, to reach beyond its day-to-day management challenges with its eye on what should be done to make the NNSA weapons complex run better today and and reduce future NSE risk.

The above referenced positive performance was significantly offset by unsatisfactory performance on both the Waste Solidification Building (WSB) project and Pu Oxide production efforts in H Area (Alternate Feed Stock II Project). These performance failures come at a time when NNSA and its corporate partners are facing substantial scrutiny related to major construction project performance and program execution performance. The lack of progress on the WSB project is especially troubling in light of the fact that senior NNSA leadership discussed with senior SRNS leadership its serious concerns about challenges to these projects. The management actions were not effective in addressing the concerns and the projects fell further behind throughout the performance period. The inability of SRNS to corporately solve these challenges is of continuing concern.

The unmet challenges of WSB and H-Areawork notwithstanding, the NNSA recognizes and specifically notes that the SRNS Vice President for NNSA Activities is making positive contributions to the NNSA equities, not only at the Savannah River Site, but across the NSE.

Overall performance in this Performance Objective is rated as **Good**.

Performance Objective 1: Nuclear Weapons Mission

Narrative Summary

EOY Adjectival

Excellent

Overall SRNS performance in this Performance Objective is rated as Excellent. SRNS exceeded expectations within the Material Recycle and Recovery (MR&R) Program through recycled and recovered tritium from limited life components (LLCs), as well as new tritium from the Tritium Extraction Facility. SRNS performed the MR&R work and received TPBARS within severe resource constraints. By maintaining at least one extraction a year, NNSA was able to avoid a future Operational Readiness Review that would further stretch limited resources. SRNS exceeded expectations during the ARMS II upgrade through its outstanding leadership during a major software upgrade designed to improve user interface and preserve the reservoir tracking system by working aggressively with the Design Agencies and customers to coordinate outage plans and reduce outage time. SRNS met all Level 2 stockpile surveillance milestones that led to accomplishing lifetime estimates and lifetime assessments for future Life Extension Programs (LEP). SRNS met the deliverables for the B61-12 LEP and W78/88-1 Study. Of particular note was the work to provide site schedule information into the B61-12 Program Integrated Master Schedule on a challenging timetable requiring extensive travel. SRNS exceeded expectations by proactively completing and implementing NNSA phase gate process requirements support of active and future LEPs. These activities supported the NA-10 "Getting the Job Done in FY13" priority list. SRNS continued to exceed expectations by performing NNSA work on an EM landlord site to minimize costs and impacts to Tritium operations.

SRNS exceeded expectations within the MR&R Program through recycled and recovered tritium from LLCs, as well as new tritium from the Tritium Extraction Facility. Loading and shipping of reservoirs for the year was completed on schedule (100%) to meet the needs of the nuclear stockpile. This was accomplished even though there was an average of three (3) schedule changes per month. The contractor exhibited exceptional management by completing loading activities ahead of schedule and shipping large quantities of LLCs to accommodate the ARMS II facility outage. Loading and shipping activities were completed throughout the year without being impacted by other major facility outages. There were no customer rejects or returns for FY13.

SRNS performed the MR&R work and received TPBARS within severe resource constraints. SRNS successfully engaged with the Federal Program Manager and SRFO to develop a strategy to extract the Cycle 10B TPBARs in FY13 as this was deemed a high priority by NNSA-HQ. By performing at least one extraction a year, NNSA is able to avoid a future Operational Readiness Review that would stretch resources further.

SRNS met all Level 2 maintenance milestones for the W76-1, W76-0, W87, W88, W78, B61, B83, and W80 stockpile systems in accordance with directive documents and within site budget allotments. SRNS met program management expectations by completing B61-12 and W78/88-1 LEP activities within budget profile, scope, cost and schedule. SRNS met expectations through implementation of an effective Weapons Quality Management System as identified in FY13 QAS 1 results and exceeded some expectations through the WQA-related performance metric results (Cost of Nonconformance and First Unit Efficiency).

SRNS met all Level 2 surveillance milestones for the W76-1, W76-0, W87, W88, W78, B61, B83, and W80 stockpile systems in accordance with directive documents and within site budget allotments that led to accomplishing lifetime estimates and lifetime assessments for future LEPs. SRNS completed enhanced surveillance program activities within scope, cost and schedule. All goals for the Stockpile Surveillance Testing Program established within the Work Authorization and Execution Plan were met or exceeded for the year. All activities requested by the Design Agencies were completed.

SRNS met the deliverables for the B61-12 LEP and W78/88-1 Study. Of particular note was their work to provide site schedule information into the B61-12 Program Integrated Master Schedule on a challenging timetable that required extensive travel. SRNS participated in the PRTs, as required. SRNS contributed to the various reporting requirements throughout the year, including the Selected Acquisition Reports, schedule and risk information for the Integrated Master Schedule, Quarterly Program Reviews, and monthly reporting which included EVMS data. SRNS exceeded expectations by proactively completing and implementing NNSA phase gate process requirements support of active and future LEPs.

The ARMS II upgrade was completed ahead of schedule and exceeded expectations. Completion of the ARMS II upgrade removed a significant production risk for the Nuclear Security Enterprise (NSE) by eliminating use of a antiquated computer software platform (FORTRAN based). Implementation of the new system will improve user interface and ensure long-term viability of the reservoir tracking system. SRNS exhibited strong management performance during the evolution which was based on advanced planning efforts that were put in place in FY12 to validate the new software's performance. The original ARMS II upgrade facility outage was scheduled to last roughly three months, but the outage was ultimately reduced to approximately four weeks through proactive engagement of the upgrade and testing process. SRNS worked closely with the Design Agencies and customers to ensure they were fully integrated into our outage plans.

SRNS completed all activities, deliverables and milestones within the budget profile, scope, cost and schedule provided by NNSA for Defense Program activities. SRNS successfully managed and met all program requirements despite restrained budget conditions, including operating under a continuing resolution and sequestration impacts. SRNS continues to exceed expectations by performing NNSA work on an EM landlord site to minimize costs and impacts to Tritium operations.

Performance Objective 2: Broader National Security Mission

Narrative Summary

EOY Adjectival

Satisfactory

Overall performance by SRNS in this Performance Objective is rated as Satisfactory. Performance under the Waste Solidification Building (WSB) Site Specific Outcome (SSO) was unsatisfactory while performance under the H-Area Plutonium Oxide Production SSO was satisfactory. The Contributing Factors (CFs) also captured SRNS support for the Broader National Security Mission not covered by the two SSOs. The SSOs were heavily weighted and drove the overall PO rating down to satisfactory while the CFs were rated above that level of performance.

The Savannah River National Laboratory (SRNL) supported the Global Threat Reduction Initiative (GTRI) Molybdenum-99 (Mo-99) Program and was extremely responsive to HQ requirements regarding technical reviews and work package status meetings. SRNS met some of it its budget profile goals but failed to meet its overall carryover goal because of poor internal communications and funds management. SRNS overcame significant technical obstacles to remain on track to complete two plutonium shipments.

SRNL provided excellent support for several programs in the Office of Nuclear Controls. SRNS Subject Matter Experts (SMEs) served as laboratory leads for the engagement with select European countries and provided high-quality SMEs for the program's domestic training efforts. SRNS SMEs are also key members in the training curriculum management and program review planning process. Annual country engagement plans, a major deliverable for this program, were submitted on time. Specific accomplishments included:

(1) SRNS SMEs participated in and presented at a workshop to representatives from customs administrations from 24 of 28 European Union (EU) Member States. This annual workshop enhances the ability of EU Member States to strengthen national export control enforcement capacities.

(2) Conducted rigorous export control technical reviews and reviewed scientist engagement projects for export concerns. SRNL also provided outstanding support to Weapons of Mass Destruction interdiction activities: and

(3) SRNS provided technical support to nuclear verification projects. The contributions to the UF6 Age Dating project were excellent. SRNS met cost, schedule and technical requirements for two other NNV projects.

SRNS was tasked with additional work scope early in FY 2013 to provide 9975/9977 container annual maintenance in support of the LANL 2MT Campaign. The task required interface with the Las Alamos National Laboratory (LANL). All tasks have been performed within the budgeted cost and have met or exceeded schedule expectations.

SRNS also developed a plan for ES3100 ballistics testing in support of NNSA's expectation to be able to store plutonium oxide in the ES3100 storage area at the K-Area facilities at SRS. SRNS developed and coordinated the plan, then scheduled and performed the test with all interested organizations. The tasks were performed within the budgeted cost and met schedule expectations.

SRNS continued to provide valuable data gathering and analysis on the existing inventories of plutonium materials to be used as feed materials to the Mixed Oxide Fuel Fabrication Facility and H-Canyon in support of the plutonium disposition mission.

SRNS's overall performance with respect to these other scope areas for the MOX Irradiation Feedstock and Transportation (MIFT) program is Good with outputs meeting the quality, cost and schedule objectives of NNSA.

In addition to supporting the Aletrnate Feed Stock 2 (AFS-2) campaign, SRNL was tasked with providing analytical chemistry services to LANL/ARIES in support of LANL's 2 MT Campaign, in accordance with the requirements of the LANL-SRS Interface Control Document (ICD). This transition was planned for the 3rd Quarter. All pre-requisite QA plans and procedures were to be completed to support a successful audit by LANL in the 2nd Quarter.

The overall effort by SRNL was good and the majority of the effort was of high quality and on schedule. However, there were some schedule delays and initial costs to update the procedures and processes to meet NQA-1 requirements that contributed to SRNL exceeding the estimated costs. The schedule delays were due to reduced QA resources at LANL because of reduced funding, shipment of samples and the SRNS furloughs. There were no additional costs for the delay in qualification of SRNL because LANL is in an operational pause and could not ship samples in the last quarter.

During fiscal year 2013, LANL and SRNL collaborated to establish a Memorandum of Understanding for SRNL to perform analytical chemistry for certification samples per the current LANL-SRS ICD. The initial audit was completed in January 2013 as planned. LANL completed follow-on QA surveillances of SRNL and subsequently added them to the approved supplier list (ASL) in September 2013.

This effort to transition the analytical chemistry to SRNL has resulted in a significant cost savings to the ARIES 2 MT Oxide Production Program and cost avoidance in the future years.

The Waste Solidification Building (WSB) Line Item Project was a Site Specific Objective (SSO) Performance Evaulation Plan for SRNS in FY13. SRNS continues to experience significant issues with cost and schedule performance on the WSB project. Despite a Dec 2012 revised project baseline, the project continues to experience construction delays with a key milestone, Mechanical Completion, slipping 10 months over a 10 month period. The project's approved baseline included 8 months of unfunded M&O schedule contingency and this M&O schedule baseline was been exceeded. During the July 24, 2012 and an October 28, 2012 review of the project's Baseline Change Proposal/BCP, the schedule contingency duration was increased to 12 months and required funding was added to finance the delays costs. The September 2013 WSB peer review found the project's construction schedule and the startup and commissioning schedule were not integrated, and perhaps as little as 1 month of schedule contingency existed for the 22 months remaining until the project's projected later CD-4 completion milestone.

While the WSB project delays appear to be largely the result of sub-contractor performance in the WSB construction, it is the responsibility of the SRNS to manage the subcontractor and the

subcontractor's performance. SRNS has placed personnel in the field to augment subcontractor staff and construction crews have worked extended shifts since March 2013 in an attempt to recover schedule. These efforts have not resulted in an improvement in overall project performance.

The WSB project's construction schedule delays resulting from re-work, late material deliveries and constructability issues resulted in negative cost impacts due to the fixed monthly SRNS staff costs of $1.5M per month: resulting in a cost impact of $15M since December 2012. Delays in mechanical installation continue to impact the installation of electrical commodities in some areas of the building and the Critical Path. SRNS does not consider the subcontractor's schedule to be accurate and has self-developed the construction subcontract portion of the schedule. WSB schedule issues identified in project and EVMS reviews were later reiterated in a draft August GAO Report on the project schedule and in a recent September WSB Peer review. An October 28, 2012 DOE-APM review of the Baseline Change Proposal (BCP) recommended schedule corrections, specifically recommending correcting the schedule in accordance with industry standards, GAO guidance, DCMA 14 points and scheduling best practices. However, a draft August 2013 GAO report of the project schedule raised issues including the schedule not being fully resource loaded, questionable vertical schedule integration, high-risk "merge points," poorly documented and excessive schedule constraints affecting viability of the Critical Path and its consequential negative effect as a project management tool. In addition, the Site's EVMS certification was suspended, due largely to EVMS issues discovered on this project. Based on deficiencies noted in a Departmental EVMS surveillance review in August 2012 and a resulting on-site review in October 2012, SRNS' EVMS certification (contractual requirement) was suspended in November 2012 and a Review for Cause/RFC was initiated. The June 2013 RFC resulted in 44 Corrective Action Requests (CARs) and non-compliance in 21 of 32 ANSI/EIA-748 guidelines. Primary areas of concern included: Estimate At Completion process; Scheduling; and the Work Authorization process and its integration with Scope Management. A few of the specific CAR titles related to project management include: "Lack of Cost Schedule/Integration", "Schedule Not Useful or Accurate for Management Purposes", and "Schedule Not Used to update Cost Processor". DOE and NNSA recently lowered its WSB monthly PARS2 rating to YELLOW in September due to the risk of project not meeting its CD-4 date.

The H-Area Plutonium Oxide Production project encountered significant delays in the completion of readiness activities and start-up in HB-Line for production of Aqueous Polishing (AP) grade oxide, which resulted in the failure to produce the required 40 kgs of material. By the end of FY-13, SRNS improved its overall focus for achieving long term success in the AFS-2 campaign, but due to continued start-up delays, SRNS will not achieve the FY-14 cumulative plutonium oxide production target. This delay, coupled with emerging issues constraining ramp up of production, has resulted in an additional year of operations projected to complete the AFS-2 mission, and represents unsatisfactory performance of this portion of Performance Objective 2.

In support of the AFS-2 campaign, SRNS completed significant facility readiness activities including extensive upgrades to the HB-Line Facility Safety Basis, completion of more than 250 procedures, major software upgrades, equipment and integrated demonstration runs, and operator training/qualifications. HB-Line facility readiness activities were completed in June 2013. The "war room" approach was utilized to drive the items to completion. Additionally, SRNS completed the required interface documents among H-Canyon, HB-Line, F/H laboratory for analysis, K-Area for transportation and interim storage. SRNS also obtained conditional status as a MOX Services

Qualified Supplier for plutonium oxide. These activities were completed in an environment of reduced base budget and mid-year SRNS furloughs.

The HB-Line start-up schedule was impacted multiple times during the year, delaying the planned 2013 start-up date approximately eight months. The primary delays are attributed to:

(1) The additional effort necessary to implement the approved HB-Line DOE standard 3009 Documented Safety Analysis/Technical Safety Requirements (DSA/TSR) including further training, procedure revisions and software updates;

(2) The need to add an additional accident scenario not analyzed in the approved HB-Line DSA/TSR, necessitating a revision to the DSA/TSR and structural qualification of piping and a glovebox;

(3) The DOE expectation that Conduct of Operations actions, including a causal analysis of issues and a corrective action plan, would need to be completed in HB-Line prior to initiating the Contractor Readiness Assessment (RA); and

(4) The delay occurred when DOE suspended the DOE RA on August 26, 2013, noting inadequate corrective actions to address the ongoing cultural conduct of operations concerns. SRNS submitted a Corrective Action Plan to DOE on September 26, 2013, and anticipated initiating the Contractor RA in October 2013, supporting initial oxide production in early calendar year 2014.

SRNS self-identified the causes of the first two delays, likely avoiding more substantial delays if discovered during the RAs. Additionally, SRNS worked collaboratively to minimize direct impacts to the HB-Line facility during mid FY 2013 SRNS furloughs continuing full work week schedules for the staff supporting AFS-2 start-up.

During FY13, SRNS improved the overall focus for achieving long term success in the AFS-2 campaign, evaluating actions to optimize ramp up and to mitigate operational throughput constraints. Key action areas included:

(1) Established a dedicated senior management position to integrate Office of Fissile Materials Disposition scopes being performed in SRNS DOE-EM facilities (H-Area, K-Area, SRNL). NNSA noted improved transparency in communications and improvement in overall program management of the AFS-2 campaign.

(2) Prepared the HB-Line AFS-2 Strategy Document updating the plans for moving forward with AP and MOX Process (MP) oxide production, ramping up production and updating the performance targets for oxide production. It identified impacts and proposed mitigation to increase the limited loading in the interim cans and addressed assumptions for qualified staffing, lab support, and material certification.

(3) Responded quickly to newly imposed liquid waste limits on H-Canyon by evaluating impacts to the out-year (FY 2015 and beyond) production targets and by identifying waste minimization initiatives to mitigate production impacts.

(4) Proactively performed an Independent Verification Review of implementation of the HB-Line DSA, focusing on procedures, operator level of knowledge and performance in the field.

H-Canyon completed dissolution of three dissolver batches of AFS-2 material in preparation of processing through HB-Line. SRNS responded quickly to the identification of high Pu-242 in batches

1 and 2 by identifying the source and reconfiguring H-Canyon to allow temporary storage of the solution, facilitating future aqueous blending. Batch 3 dissolution was completed, met isotopic specifications and is ready for use in HB-Line start-up.

H-Canyon effectively executed actions to continue safe dissolver operations in H-Canyon following a lower coil leak while processing the second batch of AFS-2 material. H-Canyon safely inspected and evaluated the vessel internals to permit the dissolver to continue operations.

H-Canyon preparations for production of MP grade polished plutonium oxide were delayed, partially impacted by the mid FY 2013 SRNS furloughs as a result of budget sequestration. H-Canyon resumed development of the flow sheet, completed the necessary Nuclear Criticality Safety Evaluation revision and submitted the H-Canyon DSA revision to DOE in August 2013. Support of the completion of the procedures continue into FY 2014 to support dissolution of Batch #4 with the MP flow sheet. Preparation of all analytical methods necessary to demonstrate the material meets the required specification will lag initial HB-Line production. Specifically, SRNS has experienced schedule delays and cost overruns for developing the capability for nitrogen analysis.

Performance Objective 3: Science, Technology & Engineering (ST&E) Mission

Narrative Summary

EOY Adjectival

Excellent

Overall performance by SRNS in this Performance Objective exceeded expectations and is rated Excellent. The contractor continues to develop new technologies and to progress the maturation of existing technologies which can be deployed within the NNSA Complex or be useful in commercial applications. The Savannah River Tritium Enterprise (SRTE) FY13 Plant Directed Research and Development (PDRD) Program was effective in meeting overall program intent for advancing the maturation of production technology essential to the long-term viability of SRTE Missions. Project activities funded in fiscal year 2013 generally focused on replacement of manufacturing technologies, the development of innovative agile manufacturing techniques and processes supporting Gas Transfer Systems, training, recruitment, and retention of essential personnel. The PDRD program funded ten projects authorizing $2.141M or approximately 1.2% of the SRTE Defense Programs budget.

SRNS implemented three primary components of a strategy that address NNSA's need for tritium research and development (R&D). It (1) launched the Tritium R&D Steering Committee to assure performance for tritium R&D in support of the NNSA's tritium missions, (2) enhanced tritium R&D capabilities, and (3) developed a new and more flexible environment to enable tritium R&D in the production facility. SRNS developed and implemented a new technology management methodology led by a new Technology Management Council in accordance with the Technology Management Plan for providing R&D that aligns discretionary investments, Laboratory-Directed R&D (LDRD) and interagency activities.

SRNS hosted 3 Independent Reviews of projects as follows: (1) Synthetic Concentrators, (2) Advanced Atmospheric Gas Concentration, and (3) Ionic Liquids. SRNS received excellent reviews from the Panel chairperson relative to these reviews. SRNS also designed and built new sample collectors and developed a sampling plan to support the Foreseti 2.1 High Explosive Test experiment at a Sandia National Laboritory (SNL) facility for NA-22. This was completed, built, and launch-tested within a month, competing against other priorities and limited operations during the 2012 December holiday period. SRNS provided excellent support for the NA-42 "Microparticles for E-Fields" project. SRNS produced and distributed 50 units capable of delivering particles of controlled composition more than 6 months ahead of schedule. SRNS continues its work in developing and testing materials that can be inserted into the Tritium Extraction Facility (TEF) piping to capture Zn-65 and retain it in the high-radiation area of the furnace module. This work will ultimately result in reduction of worker exposure to radiation.

SRNS completed fabrication, assembly and check-out of the Enhanced Particle Collector, which will improve current particle collection technology. A preliminary demonstration to collect particulates during execution of the NA-22 Pyrite project provided unique insights into this technology.

SRNS continues its long-standing strategic sustainment of capabilities residing in SRNL. The reach back capability provided to the tritium facilities through SRNL gives access to some of the same

experts who designed and prototyped the technology underpinning the current production capabilities.

SRNS continued work on designing a tritium processing facility for SHINE Medical Technologies to address a Global Threat Reduction Initiative (GTRI) directive to eliminate highly enriched uranium from medical isotope production. SRNS has matured its work on the Thermal Cycling Absorption Process (TCAP) which is essential to tritium processing at SRS. As the technology has matured, it is becoming more appealing to commercial applications. For example, the Japanese Government is currently investigating technology to clean up millions of gallons of tritium contaminated water at the Fukushima Daiichi site and the TCAP process is being considered. SRNS is also continuing to work collaboratively with other partners in the development of the mini-TCAP process.

SRNS provided excellent technical support and guidance to ensure project execution to meet the 2014 Presidential Nuclear Security Summit deliverables for shipment of nuclear material from Italy and Belgium to the U.S. A key milestone was reached in the development and approval of a 9975 shipping package amendment application for a novel package configuration to support the Italian shipment of MOX materials. SRNS developed a new can design and built its prototype, which will also assist with the Italian shipment. Subject matter expert review of the 9975 packaging and unpackaging activities were provided to the partner countries to ensure compliance with requirements. Packaging matrices have been completed with partner countries.

At the request of NA-21, the Global Threat Reduction Initiative (GTRI) Project Management Improvement Team (PMIT) audited the Mobile Plutonium Facility (MPF) program. The assessment went well and the NA-21 customer was pleased with the results. An on-site deployment of the MPF was completed with simulated materials processed through the facility with special emphasis on ensuring that modifications, lessons learned, and corrective actions from the May 2012 Cutthroat Trout Exercise in Nevada were properly incorporated. No significant issues were identified.

SRNS supported a GTRI request to identify a way to allocate storage positions for future "gap" Pu in K-Area Material Storage by developing a strategy to fund an enhancement to the K-Area Final Storage Vault scope of work. This will help facilitate the disposition of vulnerable, high-risk nuclear materials.

Performance Objective 4: Security, Infrastructure, Environmental Stewardship & Institutional Management

Narrative Summary

EOY Adjectival

Very Good

Overall performance by SRNS in this Performance Objective is rated as Very Good. FY13 presented numerous budget challenges throughout the year which included the constraints of operating under a Continuing Resolution (CR) and Sequestration. SRNS was very responsive to multiple budget changes throughout the year and was still able to meet special NNSA HQ requests to complete initially unfunded activities by exercising sound business practices. Facilities were maintained in a high state of readiness throughout the year with minimal downtime which ensured all deliverables were provided on or ahead of schedule. There were no customer issues from a quality standpoint and metrics showed improvements from prior years. All activities were conducted in a safe and secure manner as evidenced by several NNSA HQ reviews conducted throughout the year, as well as metrics. Also, all this was performed at a time when the Office of Environmental Management (EM) budget at SRS was declining and SRNS was required to ensure that NNSA interests were not adversely impacted due to reductions in landlord services.

SRNS managed an effective and efficient Safety and Security (S&S) program in FY13 at a level which exceeded expectations. SRNS accomplished all of the Performance Evaluation Criteria on schedule and under budget. Lessons learned from the Y-12 security incident were deployed to enhance security posture. Program milestones were also completed on schedule and under budget. By using sound financial management principles, SRNS was able to leverage the landlord contract and re-deploy employees to other areas of the site which needed security support. This resulted in SRNS having sufficient carryover funds to support FY14 Tritium operations during the recent lapse of appropriations.

SRNS conducted the annual security survey of the Waste Isolation Pilot Plant (WIPP) on behalf of DOE Savannah River. The survey covered all security topical areas. Two SRNS security specialists conducted the survey and transmitted the survey to DOE Savannah River in less than 60 days. (2Q MSAP) NNSA's Office of Defense Nuclear Security (NA-70) conducted a "no notice" Security Assessment of Program Management, Information Security, and Physical Security during the week of August 26, 2013. There were no findings, OFIs or suggestions identified for SRNS. SRNS hosted and provided "on the job training" for an S&S engineer from the WIPP facility in Carlsbad, New Mexico. The training consisted of working with Security System personnel in Tritium and L Area to learn security system troubleshooting techniques and how to conduct annual performance testing on Intrusion Detection Systems. The OJT supports the WIPP site in closing a DOE survey finding.

SRNS led the system upgrade of the Automated Reservoir Management System (ARMS) to ARMS II system. This was a significant risk reduction for the Nuclear Security Enterprise (NSE) as the existing classified system was a FORTRAN based platform that had been in operation for more than 25 years and consisted of obsolete. The new system had over 800,000 lines of code and required the migration and validation of over 18 million records and required the coordination of multiple agencies

to execute this significant pause in production and shipping. The classified ARMS II network commenced operation in August 2013, two months ahead of schedule, with no issues.

SRNS continues to manage to keep the E3S, a legacy security monitoring system, in operation. This is a major challenge as the system is well beyond its expected life and is no longer logistically supported due to its dated architecture. The system currently continues to meet all requirements and there have been no impacts to facility operations. In FY13, SRNS received Technical Security Approval for the Fortress Secure Wireless Monitor Network. The Fortress Network is being installed for proof of concept within portions of the tritium facilities. Installation was completed ahead of the September 30, 2013 program date, and is conducting operational and reliability testing. In conjunction with this, SRNS wrote an updated security plan. This is the first wireless security plan to be approved by the Office of Health, Safety and Security (HSS) and is being used as the model for the complex.

Since FY11, SRNS has significantly reduced the number of Security Incidents. The total number for FY13 was five (5). This is a significant reduction from the 16 in FY11 due to continued vigilance and creative and innovative methods of personnel reinforcements of requirements. SRNS uses monthly notices to personnel to reinforce the awareness of security requirements. SRNS also took actions to reduce Nuisance/False Security Alarms. Completion of this activity required coordination of all groups in Tritium to elevate the awareness of proper protocols and measures to avoid nuisance and false alarms. The rate for FY13 was 0.14 per hour as compared with 0.19 per hour in FY12. Based on feedback from the Office of Independent Oversight (OIO), SRNS has one of the lowest rates in the NSE which shows exceptional management of nuisance/false alarms. SRNS completed the annual review of the Classified Distributed Control System (DCS) for 264-H classified intercom and the 249-H Distributive Control Network with no issues or discrepancies reported. These are mandatory requirements to keep the facility operational.

Throughout the year, SRNS conducted S&S initiatives to ensure security awareness. Initiatives included activities such as (1) providing information security cards to employees that can be worn on badge lanyards which focused on prohibited/controlled items and escort requirements, (2) issued a basic security questionnaire to gauge employee knowledge of security to determine areas that need improvement, (3) holding security blitzes at the entry control facility after holiday weekends to remind employees of prohibits items, and (4) conducted an open house in Tritium Area to enhance security awareness. Document reviews conducted throughout the year resulted in errors which were generally corrected on the spot. In FY13, 953 classified documents were reviewed and 24 had minor errors, which represents a 2.5% error rate, which is a reduction from the low rate of 2.7% achieved in FY12. SRNS was very proactive in notifying document custodians of the errors at the time of discovery, and held special refresher briefings to DC/ROs using examples found during these reviews.

There were no line item projects within the Tritium Facilities for FY13.

All classified information networks were maintained operable throughout the year with minimal to zero downtime.

SRNS effectively managed its' budget for the year. FY13 was an unusual budget year with many constraints and uncertainties, particularly in light of the mid-year budget sequestration implementation. As a result of the uncertainties, SRNS was required to work various budget scenarios throughout the year to address NNSA HQ questions, as well as determine what financial impacts NNSA could experience at SRS due to changes in the EM budget.

Despite funding challenges throughout FY13, SRNS continued to execute the Tritium Responsive Infrastructure Modifications (TRIM) Program to relocate and right-size functions from Cold War legacy facilities into more modern facilities to reduce cost and footprint. Several small scale projects were completed during the year in order to maintain the schedule to facilitate the readiness for execution of a line item project scheduled to be begin in FY17.

SRNS provided quality and timely support to the overall Fissile Material Disposition (FMD) program, particularly with integration tasks and functions. SRNS provided input data and analysis to NNSA and contributed significantly to emerging programmatic studies and alternatives analysis. Throughout FY13, SRNS provided timely support to NNSA for the Surplus Plutonium Disposition Supplemental EIS. SRNS provided high quality updated analyses and supported development of responses to public comment in support of preparation of the final SEIS. SRNS developed a Nuclear Non-Proliferation (NNP) Milestone Summary Report that is issued monthly. All Plutonium Disposition & Infrastructure Program (PDIP) NNSA Annual Operating Plan (AOP) and Work Authorization Execution Plan (WAEP) Milestones were completed on or ahead of schedule. Ten of 15 MOX Irradiation, Fuel, and Transportation (MIFT) AOP and WAEP Milestones were completed on or ahead of schedule. The five milestones that were not completed on schedule were impacted by the FY13 budget constraints and the delays in initiating AFS-2 plutonium feed production.

SRNS maintained the WAEP with timely revisions to reflect Contracting Officer letters of direction and changes in program funding and priorities. Financial performance throughout the year remained within expectations for MIFT, WSB Operating Expense (OPEX), and PDIP. SRNS managed carryovers in all three accounts to ensure adequate funding through the first quarter of FY14 under a Continuing Resolution. NNP provided direct support to NNSA in the resolution of comments and revision of the FMD Preliminary Program Execution Plan (PPEP) and the Fissile Material Disposition Risk Management Plan. During the fourth quarter, SRNS was proactive and cost effective in addressing NNSA's needs with respect to risk management resources for both the FMD program and the MOX Fuel Fabrication Facility (MFFF) Project through the assignment of additional resources and leveraging existing resources. SRNS also undertook a major effort to review, revise, or cancel the entire suite of Interface Control Documents (ICDs) that support the FMD program. All ICDs were completed by the end of the year as scheduled.

An integrated team (NNP, HB-Line, NNSA, DOE-SR, and SRR) developed a Waste Minimization Plan for H-Canyon liquid waste processing that will allow the facility to meet its production objectives in FY14 within the constraints specified by the high level waste contractor. All FY13 Infrastructure Improvement Program activities authorized by NNSA were completed in a timely, quality, and cost effective manner. NNP Staff continued to support the maturation of the WSB operations activities through the preparation and distribution of Operating Experience/Lessons Learned documents to NNP management/subject matter experts. NNP Staff also led the Corrective Actions Review Board (CARB) which is one of the earliest activities an operating organization undertakes in support of

establishing conduct of operations excellence. The NNP organization exhibited an excellent safety record with no TCR, DART, or First Aids in the last three years. Security performance during the year remained good. The SRNS WSB Project Team continues to exhibit an excellent safety and security record.

The Health and Safety Program continued to function effectively in meeting all applicable regulations and requirements of 10 CFR 851. SRNS consistently demonstrated a strong commitment and awareness to worker safety and health in the execution of routine, non-routine, and project work in a challenging budget environment. The knowledge and expertise was demonstrated as there were several significant facility outages completed during the year and all were completed without injury and were completed ahead of schedule. Safe behavior was actively promoted through the conduct of safety-based surveys, walk downs, observations, safety meetings, and other activities. SRNS maintained its leadership position for Human Performance Improvement initiatives which continues to demonstrate significant voluntary error reporting from its employees, and exhibiting a "just culture" which positively influences trust and respect leading to a strong and effective safety conscious work environment.

SRNS management of legal issues during FY13 met expectations. Overall evaluation of General Counsel matters is provided by the EM Operations Office with input from SRFO.

SRNS effectively managed the quality assurance program performance in accordance with Federal, DOE and NNSA quality requirements/directives and provided quality products to customers. Overall, quality metrics continue to show that SRNS is providing product to the customer that meets all requirements. The Cost of Non-Conformance has continued to decline over the past several years and was < 0.2% in FY13. This indicates that SRNS is providing final products with minimal rework required. There were no returns or rejects from receivers in FY 13.

SRNS completed all activities for the Contractor Assurance System (CAS) Affirmation ahead of schedule in FY13. NNSA HQ subsequently suspended the CAS Affirmation process for FY13. As a result of this decision, SRNS was not able to achieve affirmation in FY13. SRNS continues to mature its program development and implementation.

SRNS's performance in support of the MFFF project met and in many cases exceeded NNSA's expectations during the rating period. They provided support as requested by Shaw AREVA MOX Services, the MFFF contractor, in a variety of technical, programmatic, and labor-intensive areas in a quality, timely, cost effective manner. SRNS provided Nuclear Quality Assurance (NQA)-1 services for the following: 1) corrosion tests on stainless steel materials; 2) detailed laboratory analyses of colemanite aggregate and concrete samples; 3) fabrication of stainless steel penetration plates for installation in the MFFF to support the project construction schedule; and 4) MOX Services NQA-1 Triennial Audit, the scope for which included five SRNL test laboratories, two Site Infrastructure facilities, and the SRNS Quality Services Department. In addition, SRNS provided support for construction related activities such as utilities (electricity, domestic, sanitary and fire water), personnel security badging, and emptying construction roll-off and compactor pans, collecting material for recycling, and transporting scrap wood to schools in the region. SRNS shared safe work processes with MOX Services in areas they excel in such as a demonstration of the Single Point Lockout/Tagout (SPLT) application that is used to initiate, install, track, and remove lockouts from various pieces of

facility equipment. SRNS Site Communications worked with MOX Services throughout the year to troubleshoot and repair/replace Safety Alarm/Public Address (PA) system amplifiers and speakers across the MFFF complex necessary for worker safety. SRNS also provided technical and financial expertise directly to NNSA in the areas of structural engineering reviews, Basis of Estimate (BOE) documentation for process glove box fabrication, assembly, disassembly, and 9975 shipping package operations and maintenance.

SRNS established the technical basis and obtained DOE approval of a DOE-STD-3013 equivalency for stabilization of the HB-Line product at reduced temperature. This equivalency was required to use existing furnaces in HB-Line for production of plutonium oxide from AFS-2 materials, successfully mitigating a major technical risk. DOE-EM approval of the 3013 equivalency was based on recommendations from an independent review team of plutonium packaging experts and addressed the requirements that are critical for transportation and storage of the HB-Line product. SRNS provided leadership for a similar effort at LANL to reduce the temperature required for stabilization of the DMO product and associated increased operational costs. The DMO equivalency has also been submitted for review and approval by DOE-EM. SRNS proactively identified a strategy to support transition to increase loading of AFS-2 product in the interim storage containers and off-set packaging impacts of delayed 3013 canning. This effort will provide a new recombiner to support increased loading of 9975 Packaging for interim storage and parallel activities that address modification of the interim storage configuration and definition of controls that prevent exposure of oxide materials to excessive relative humidity prior to packaging. Successful implementation has potential for significant cost avoidance associated with procurement of 9975 drums and mitigating impacts to storage space in K-Area. SRNS completed a significant effort to coordinate with MOX Services, DOE and NNSA to finalize the MP Oxide Interface Control Document documenting the required physical and chemical specifications.

Performance Objective 5: Contractor Leadership

Narrative Summary

EOY Adjectival
Good

Overall performance by SRNS in this Performance Objective is rated as Good. There are, however, significant concerns with the SRNS leadership team, both the on-site leadership resources and they corporate resources that could be brought to bear in solving negative trending project execution performance. This is most evident in the Waste Solidification Building and Alternate Feed Stock II Projects which are performing well below NNSA expectations, and were the most significant performance failures for SRNS during FY13.

Strategic Vision

SRNS demonstrate good enterprise governance through a partnership with Los Alamos National Laboratory (LANL) throughout the year on a plan for the execution of research and development (R&D) reservoir function test on 4GU Gas Transfer System (GTS) units, a test which were historically performed at LANL. This collaboration effort with LANL will permit LANL to reduce inventory at the Weapons Engineering Tritium Facility (WETF) and improve the NSE utilization of resources.

SRNS established a strategic Tritium Steering Committee to reestablish the partnership with Sandia National Laboratory (SNL), LANL, Savannah River National Lab (SRNL) and the Tritium enterprise. This has resulted in a partnership with SNL that leverages the SRNL and Tritium expertise and facilities to reestablish capabilities lost to NNSA when SNL shut down its facility.

SRNS completed the transition to the Automated Reservoir Management System (ARMS II), a mission critical computer system that was over 35 years old. Extensive planning and testing in FY 13 resulted in a revised 5 week outage plan – down from the original 3-month timeline, with the actual outage completed in just 4 weeks. SRNS took the lead and partnered with the Design Agencies (DAs) and program offices to ensure this transition was effectively integrated with the at-large LLCE supply chain requirements. The transition was completed ahead of schedule and shipments resumed on time and removed a significant vulnerability to the LLCE program and the DoD customers.

SRNS was very proactive in assisting the Kansas City Plant (KCP) with an inadequate fill stem-cleaning process issue. SRNS quickly identified and resolved the issue with the KCP process which was creating poor quality pinch welds on test fill stems for the B83 Alt 353 Sp1116 reservoir.

Sequestration caused a cessation of the FY13 B83 Alt 353 activities across the NSE, but SRNS recognized the need to load a small inventory of reservoirs and place them in Life Storage because of the 1-year reservoir Integrity testing requirement. SRNS negotiated an agreement with the DA and programs to load a specified number prior to the outage, resulting in saving at least six months in the timeline to First Production Unit (FPU).

Enterprise Leadership

SRNS genuinely supported and participated in the Tritium Focus Group Meeting held April 23-25, 2013. The Focus Group had historically met twice a year for about 12 years up until 2009, when it was canceled. The Focus Group was revitalized and new charter and chairs nominated. The purpose of the group is to enhance communications and to focus on improvement in tritium safety, handling, transportation, storage and operations.

SRNS is supporting a multi-lab team to update the Global Initiative for Proliferation Prevention and has taken the primary lead in the complex on threat assessments and in supporting Congressional engagements.

Long-Term Partnerships

SRNS continues to mature its' partnership with SNL in the area of Tritium R&D support. The recent standup of the R&D Steering Committee provides an excellent mechanism for teaming efforts within the NSE which can promote leveraging of funding and avoidance of redundant activities in R&D.

SRNS supported NNSA and LANL to investigate the use of LANL Process Qualification and a Direct Metal Oxidation furnace lower temperature equivalency, which will reduce processing costs and personnel exposures at LANL and provided documentation for the Hanford 3013 Process Qualification equivalency.

SRNL supported NNSA and LANL to provide cost effective analysis of plutonium oxide samples from the LANL "UPOP" process. Analysis of the initial samples began in April. This effort reflects SRNS efforts to provide cost effective solutions across NNSA programs and sites.

At the request of LANL, SRNL accelerated annual maintenance on a set of thirty 9975 container packages to support a shipment to New Mexico. Additionally, SRNL initiated the design of spacer materials for use in the ES-3100 during the ballistics test phase and worked with the local security organizations for scheduling of the tests.

As previously noted, SRNS continues to work with LANL and SNL to re- establish SRNS R&D work that had previously been done at SNL and LANL.

Accountability and Responsibility

SRNS's Human Performance Metrics are used to support SRNS personnel and provide significant support as Board Members and contributors for community groups involved with current and former NNSA missions, including Citizens for Nuclear Technology Awareness, SRS Heritage Foundation and SRS Citizens Advisory Board.

SRNS' Management Assurance System (MAS) helps drive the Quality Program in FY13. The MAS helped drive accountability and responsibility and the results were evident in the low cost of nonconformance for FY13 as well as no returns/rejects from customer. No customer returns of LLC were received in FY13 and the cost of nonconformance was 0.25%, significantly under the goal of 5%.

Interagency Integration

SRNS has submitted an invention disclosure "Thermal Cycling Process for Removing Heavy Hydrogen Isotopes from Water" based upon technology integral to the Tritium Mission which may be leveraged to benefit a wider application. This novel concept has been identified as a leading technology candidate for effective detritiation on projects such as the continuing clean-up of millions of gallons of low level tritium contaminated water at the Fukushima Daiichi Nuclear Facility in Japan. Discussions are on-going between SRNL, Environmental Management and National Security directorates on further development of this concept.

Work Environment

SRNL has an active post-doc and internship programs that maintain and facilitate science and research support of NNSA as "state of the art", while maintaining the resource pipeline with advanced, cleared candidates.

SRNS employees have worked more than 4.3 million consecutive hours without a lost workday incident.

Enterprise Solutions

SRNS continued to provide Risk Management support to the W78/88-1 LEP. As a result of SRNS' interactions, the Air Force became receptive to adopting an approach similar to the one being used for the B61-2 LEP, and requested further SRNS consultation and collaboration in developing their joint risk management process and plan.

SRNS provided expertise in the quality management area to other NSE partners to improve quality across the complex.

Professional Excellence

SRNS Senior Vice President for NNSA Operations and Programs, Dennis Donati, was named Executive of the Year by the Savannah River Leadership Association for 2013. SRNL also occupies leadership roles in technical and scientific societies, including some national roles. Examples include, President of the American Ceramic Society, Chair of the American Nuclear Society's Nuclear Nonproliferation Technical Group, and Chair of the Institute of the Nuclear Material Management Packaging, Transportation, and Disposition Technical Committee.

Communication with NNSA Leadership

SRNS has been proactive in communicating with NNSA leadership on items such as the Strategic PEP, FY13 funding issues and associated risks of not getting funding for certain activities, and ensuring that NNSA was kept informed of impacts to NNSA programs due to EM funding issues.

NNSA senior leadership were required to engaged with SRNS senior leadership over serious concerns and challenges to the Waste Solidification Building (WSB) Capital Line Item Project and the Alternate Feedstock II Project at the H-Canyon facilities. The unsatisfactory performance of SRNS leadership to deliver on these two critical projects is a significant concern.

SRNS is tasked to complete construction and initiate startup testing of WSB in accordance with approved cost & schedule baselines and related work scope as defined in the FY13 Work Authorization & Execution Plan (WAEP). The actions of the SRNS leadership team in addressing NNSA warnings and concerns were not effective and SRNS missed its baseline schedule (10-month slip for mechanical completion) and its schedule contingency resulting in an unfavorable $15M cost impact; none of the $4M FY13 WSB award fee is recommended for award.

Similar concerns were present with the lack of Pu oxide production from H Canyon in furtherance of the Alternate Feed Stock II project supporting MOX.

Management Assurance Systems Leverage

SRNS traveled to Kansas City Plant to benchmark Program Management processes with Honeywell. By leveraging parent company resources and expertise, SRNS is better able to self-assess its current process.

SRNS also leveraged its expertise in Quality Management and traveled to LANL to assist in their classified parts inventory Quality Assurance Survey (QAS).

SRNS has leveraged company resources and supported several employee exchanges between SRS and the KCP. This builds knowledge, awareness, and an appreciation of the challenges and successes between the two sites and strengthens the supplier – buyer relationships between the two sites.

Critical Self-Assessments

SRNS has worked to ensure that critical self-assessments of its work activities are being performed. Items noted during the quarter include use of their internal Facility Evaluation Board reviews, Senior Management Review Board actions relative to the ARMS II and secondary stripper outages, error reporting, and the pre-readiness assessment by the operations team for AFS-2 start-up.