National Nuclear Security Administration

Savannah River Nuclear Solutions, LLC

Performance Evaluation Report

Contract No. DE-AC09-08SR22470

NNSA Savannah River Field Office (SRFO)

Evaluation Period: October 1, 2023 through September 30, 2024

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Executive Summary

Contract Structure and Background

Contract number DE-AC09-08SR22470 between the National Nuclear Security Administration (NNSA) and Savannah River Nuclear Solutions, LLC (SRNS), is a Cost-Plus-Award-Fee incentive type contract with separate Contract Line Item Numbers (CLINs) to distinguish contract requirements for the management and operation of the Savannah River Site (SRS) – CLIN 0001, and certain Capital Construction Projects – CLIN 0007. This Performance Evaluation Report (PER) documents NNSA's evaluation of SRNS' performance against performance criteria established in the CLIN 0001 – Performance Evaluation and Measurement Plan (PEMP), and Sub-CLIN 0007AA – Savannah River Plutonium Processing Facility (SRPPF) Project Award Fee Plan (AFP) for the period of October 1, 2023, through September 30, 2024. The PEMP and AFP criteria are incorporated in this report as Attachments 1 and 2.

Pursuant to the terms and conditions of the Contract, the PEMP and AFP set forth the criteria by which NNSA evaluates SRNS performance, as required by Federal Acquisition Regulation (FAR) Part 16.4, *Incentive Contracts*, which outlines expectations for administering award-fee type incentive contracts. This is the type of contract in place between NNSA and its management and operating (M&O) partners. A key requirement of FAR Part 16.4 is to establish a plan that identifies award-fee evaluation criteria and "how they are linked to acquisition objectives which shall be defined in terms of contract cost, schedule, and technical performance."

CLIN 0001 – Management and Operation of SRS

In accordance with the FAR Part 16.4, the PER assesses SRNS performance against the PEMP and provides the basis for determining the amount of award fee earned by SRNS. NNSA took into consideration all input (e.g., Contractor Assurance System (CAS), Program Reviews, etc.) obtained from NNSA Program and Functional Offices both at headquarters and in the field. The work performed for NNSA programs at SRS is conducted by SRNS under an M&O Contract for fiscal rear (FY) 2024. This is a Department of Energy Office of Environmental Management (DOE-EM) contract under which NNSA-funded and -directed work is performed.

In FY 2024, SRNS demonstrated a continued commitment to excellence respective to mission delivery, ensuring all Department of Defense (DoD) shipments were on time. SRNS completed five tritium extractions and began glovebox maintenance activities. SRNS exceeded program downblend and shipping expectations and continued making progress delivering new plutonium disposition processing capabilities. SRNS also demonstrated competency and expertise in planning and preparation efforts for the Calendar Year (CY) 2025 Outage. SRNS resolved immediate equipment issues, enhanced procurement processes, and initiated enhanced vendor oversight. SRNS significantly improved emergency management drill performance, which greatly contributes to increased worker safety.

SRNS leadership was instrumental in preparing for a successful DOE-EM to NNSA landlord transition. SRNS continued focusing on CAS by fostering a culture of critical self-assessments to promote accountability and proactively address performance. SRNS focused on recruiting and hiring critical skill area positions by supporting local college apprenticeship programs and hosting various hiring events. SRNS continued focusing on Conduct of Operations through the Advancing Conduct of Operations Excellence (ACE) team, which identifies issues before problems occur.

Throughout the year, SRNS experienced cost and schedule issues with three Recapitalization projects, resulting in three other small projects being deferred or canceled. However, SRNS leadership recognizes the need for improvement and implemented corrective actions to strengthen future small project management and performance.

*Note: SRNS' performance for FY 2024 on NNSA efforts is measured against the NNSA Corporate PEMP. The NNSA PEMP consists of five performance Goals supplemented with Objectives and Key Outcomes for each Goal. Fee is distributed among the five Goals as specified in the PEMP. For SRNS, Goal 3 is not applicable and therefore has no associated fee. The work measured against the NNSA PEMP is discussed under Goals 1 through 5 below.

SRNS earned an overall rating of Excellent during this performance period. SRNS earned an Excellent rating for Goals 1, 2, and 5 and a Very Good rating for Goal 4. Specific observations for each Goal are provided in the CLIN 0001 – Management and Operation of SRS Performance Evaluation section of this report.

Sub-CLIN 0007AA - SRPPF Project Management

This PER also provides NNSA's evaluation of SRNS' performance against the criteria outlined in the FY 2024 SRPPF AFP for the period October 1, 2023, through September 30, 2024. Pursuant to the terms and conditions of the Contract, the AFP sets forth the criteria by which NNSA evaluates SRNS' performance and upon which NNSA determines the amount of award fee earned.

NNSA used a performance-based approach to evaluate SRNS' performance against Subjective Evaluation Factors (SEFs) and Performance Based Incentives (PBIs) established in the AFP. The PBIs represent specific project deliverables with established objective incentives. A ratio of 70 percent of available fee was allocated to the PBIs and 30 percent was allocated to the SEFs.

NNSA oversaw performance throughout the performance evaluation period and provided monthly feedback to SRNS highlighting accomplishments and issues observed. NNSA considered these monthly feedback reports, along with SRNS' end of year self-assessment report, when determining the performance ratings. The end of year performance ratings were determined in accordance with FAR Subpart 16.4. The overall rating and the percentage of award fee earned was based on aggregate scoring of the SEFs.

SRNS progressed the SRPPF project during the performance period and achieved several important milestones, including discrete PBIs such as:

- Completion of the Main Process Building (MPB) Subproject Preliminary 60 percent Design.
- Completion of the MPB Subproject 90 percent Process Design.
- Submittal and approval of the MPB Critical Decision (CD)-3E Process Equipment (Glovebox) Package.
- Completion of incentivized Equipment Demolition and Removal (D&R) and Coating removal scopes.

In addition, SRNS achieved the following important non-PBI milestones:

- Award of the Construction Manager (CM) Subcontract.
- Identification of additional safety controls for enhanced facility worker safety and incorporation of these controls into safety documents such as the Safety Design Strategy (SDS).
- Approval of CD-3X packages for Structural D&R (Y799 CD-3C), Underground Site Work (Y808 CD-3A), Sandfilter Mud Mat (Y863 CD-3A), and Gloveboxes (Y799 CD-3E).

SRNS earned an overall SEF rating of Good and 52 percent of the award fee during this performance period with a Very Good rating for SEF 1 (Effective Interactions and Timely Responses), Satisfactory for SEFs 2 (Integrated Project Management) and 3 (Business Systems), and Good for SEF 4 (Quality/Contractor Assurance).

The relatively lower ratings in the areas of Project Management and Business Systems were primarily driven by:

- Poor measured project performance over the performance period.
- Excessive delays in the execution of critical long-lead procurement and construction activities (CD-3X scopes) following NNSA CD-3X approvals.
- Poor Integrated Master Schedule quality.
- Deficiencies in the SRNS procurement processes resulted delays and rework.
- Content and quality issues associated with SRNS CD packages.
- Slow pace of the transition of the project Engineering, Procurement, and Construction from SRNS to the Construction Manager.

Specific observations for each SEF and a summary of PBI achievements are provided in the Sub-CLIN 0007AA – SRPPF Project Management Performance Evaluation section of this report.

CLIN 0001 – Management and Operation of SRS Performance Evaluation

Goal 1: Mission Delivery: Nuclear Weapons
SRNS Amount of At-Risk Fee Allocation: $13,921,286

Goal 1 Summary

SRNS earned a rating of Excellent, and 95 percent of the available award fee allocated to this Goal. SRNS exceeded almost all of the Objectives and Key Outcome under this goal and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, the accomplishments significantly outweighed issues, and no significant issues in performance existed.

Objective 1.1

Overall, SRNS accomplished the established lead time goals throughout the year and continued to make on-time shipments to the customer, even with last minute change requests. Consistency in exceeding these goals demonstrates SRNS' commitment to excellence.

SRNS consistently achieved rate production schedules working effectively with other laboratories, plants, and sites to ensure on-time Gas Transfer System (GTS) shipments for B61-12 and W88 ALT 370 programs, as well as to ensure continued on-schedule progression of product realization activities on the W80-4, W87-1, and W93.

Objective 1.2

SRNS completed all five FY 2024 tritium extractions and began Glovebox (GB)-500 open glovebox maintenance valve replacement activities on schedule.

SRNS completed all long-term and near-term loading commitments.

SRNS established collaborative undertakings with the Los Alamos National Laboratory (LANL), focused on benchmarking LANL's quality assurance program and procedure development organization. Other efforts focused on development of roles and responsibilities for process engineers and Pit Processing in the LANL Plutonium Facility.

Objective 1.3

SRNS filled all required stockpile sustainment GTS limited life component exchanges per schedules, to include the addition of several units to the B61 schedule that were requested outside the baseline. This latter accomplishment enabled the requested quantities to be delivered to the U.S. Air Force.

Objective 1.4

SRNS continued to excel in performing all scheduled surveillance activities, allowing confidence to be maintained in the stockpile. SRNS' successful performance was exhibited by the SRNS Tritium Diffuser Design Team being awarded the Department of Energy Secretary's Achievement Award for efforts to develop new and improved diffusers for the tritium processing facilities.

In addition, SRNS documented the design innovation hardware received from Advanced Manufacturing Development/Sandia National Laboratories, and prepared for exposure, aging, and future testing in support of the Aging and Lifetimes Program.

Key Outcome 1.1

The Key Outcome was met for FY 2024. The SRNS Pit Production Operations and Program organization worked to establish plans and strategies to ensure work was planned in collaboration with the project and other key players across the Nuclear Security Enterprise (NSE). Deliverables supporting achievement of the Key Outcome were submittal of the Level 1 Integrated Master Schedule and a Mission Execution Strategy document with competency plans to address First Production Unit acceleration.

SRNS also collaborated with the Office of Pit Production Modernization to deliver a foundational framework to define an executable strategy to achieve a minimum War Reserve rate production of 50 pits per year, which minimizes the time between CD-4 and full rate production by developing workforce competency plans, strategies for non-nuclear training using surrogate materials and the selection and development of those materials, recording and implementing lessons learned, improving processes, and continuing to explore schedule acceleration opportunities.

Goal 2: Mission Delivery: Global Nuclear Security
SRNS Amount of At-Risk Fee Allocation: $2,784,257

Goal 2 Summary

SRNS earned a rating of Excellent, and 95 percent of the available award fee allocated to this Goal. SRNS exceeded almost all of the Objectives under this goal, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, accomplishments significantly outweighed issues, and no significant issues in performance existed.

Objective 2.1

SRNS provided the Office of International Nuclear Security (INS) with critical subject matter expertise on a range of nuclear security topics, including playing a leading role in INS contingency planning efforts and hosting a trilateral meeting for two key INS partners on nuclear material accounting and control and vulnerability analyses.

Objective 2.2

For this Objective there was no scope or funding assigned to SRNS in FY 2024.

Objective 2.3

SRNS provided excellent technical and programmatic support to remove weapons-usable nuclear materials and ensure peaceful use of those materials. SRNS exceeded Surplus Plutonium Disposition (SPD) program downblend and shipping expectations and continues to make progress delivering new plutonium disposition processing capabilities.

Objective 2.4

For this Objective, there was no scope or funding assigned to SRNS in FY 2024.

Objective 2.5

Throughout FY 2024, SRNS maintained the highest levels of mission readiness and provided excellent operational support to the Nuclear Emergency Support Team (NEST) in executing the Radiological Assistance Program and Aerial Measuring System in Region 3. To ensure one team was continuously

available, SRNS provided three experienced teams with rotating on-call duties throughout the year and deployed to support numerous activities.

Goal 3: Mission Innovation: Advancing Science and Technology
SRNS Amount of At-Risk Fee Allocation: $0

Goal 3

Not Applicable for SRNS.

Goal 4: Mission Enablement
SRNS Amount of At-Risk Fee Allocation: $6,960,644

Goal 4 Summary

SRNS earned a rating of Very Good, and 85 percent of the award fee allocated to this Goal. SRNS exceeded many of the Objectives and Key Outcomes, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, accomplishments greatly outweighed issues, and no significant issues in performance existed.

Objective 4.1

SRNS' Office of Environmental Stewardship, Safety and Health successfully continued enhanced tritium operations and production. SRNS sustained the existing robust safety culture by performing various inspections, walkdowns, chemical barcoding, and chemical inventory management.
Additionally, the Production Agency at SRS began the process of establishing a site Weapon Quality Management System (WQMS) to implement the Weapon Quality Assurance Policy. Once fully completed, the established WQMS will extend beyond Tritium Operations and include SRPPF.
SRNS successfully entered open glovebox maintenance for GB-500 for the first time since the startup of the Tritium Extraction Facility. Through effective planning, training, and implementation of radiological controls, SRNS successfully managed and mitigated challenges associated with the presence of Zn-65 in this specific glovebox.

Objective 4.2

SRNS collaborated across line organizations to develop novel approaches in addressing numerous equipment challenges throughout FY 2024, which had the potential to affect not only extraction milestones but also mission delivery. SRNS' capability to be agile in a dynamic operating environment sustained their ability to meet all DoD commitments with no missed shipments.

SRNS' competency and expertise has been demonstrated in their preparation for the CY 2025 outage. SRNS mitigated project risks, identified "fit and finish" problems with the new chillers prior to facility installation, and ensured critical equipment will perform as designed. In light of equipment concerns, SRNS formed a war room cross organizational team to actively address all equipment condition problems. These mitigation efforts should prevent an impact to the CY 2025 project schedule.
SRNS completed all final designs and baselined all six CY 2025 Outage Tritium small projects.

While SRNS had cost and schedule issues with three recapitalization projects, six recapitalization projects were completed on schedule and within budget. Due to the performance of the three recapitalization projects, three other small projects were deferred or canceled. Project Y751: Reservoir Finishing Relocation Project was late and Project Y788: 234-7H New Utility Support Building and Exhaust

Ventilation System Project was also late. A portion of Project Y788 schedule delay was due to late actions by SRNS to secure additional funds from headquarters.

Objective 4.3

SRNS analyzed the security posture for Tritium Operations, recommended changes to mitigate significant risks, and began implementation within allocated resources. SRNS supported landlord transition by ensuring a seamless transition in badging operations and streamlining the Foreign Ownership, Control or Influence process for procurement. SRNS also supported the One NNSAccess initiative by reprogramming the badge office information technology (IT) systems to use automated, real-time data from headquarters.

Objective 4.4

SRNS supported the financial activities associated with transferring the M&O Contract from DOE-EM to NNSA.

Objective 4.5

SRNS effectively and efficiently supported court filings in the ongoing pit production National Environmental Protection Act litigation and assisted with *Freedom of Information Act* requests.

Objective 4.6

SRNS consistently delivered effective, efficient, and responsive Cybersecurity and IT systems for FY 2024. SRNS delivered adaptive day-to-day IT and Cybersecurity Operations for FY 2024, demonstrating excellent quality documentation and implementation of cyber controls.

Objective 4.7

SRNS significantly improved drill performance and staffing turnover, which were improvements noted by the Defense Nuclear Facilities Safety Board. SRNS' drill and exercise enhancements introduce a new level of complexity, which significantly contributes to increased worker safety.

Objective 4.8

Through participation in NNSA's Enhanced Mission Delivery Initiative (EMDI)-9 working group, SRNS Supply Chain Management team shared across the enterprise how SRNS successfully eliminated procedural barriers and non-value-added steps in the procurement process. This was accomplished by eliminating more than 70 SRNS forms and improving more than 60 job aides for the SRNS procurement staff. These actions helped accelerate mission-critical acquisitions.

Key Outcome 4.1

The Key Outcome was met for FY 2024. SRNS SPD Project Team successfully resolved issues identified by DOE's Office of Project Management (DOE-PM) External Independent Review, resubmitted a full CD-2/3 package, and supported NNSA efforts to present the project to both the Project Management Risk Committee, led by DOE-PM-1, and the Energy Systems Acquisition Advisory Board, led by the NNSA Administrator. This will allow for approval of CD-2/3 and SRNS can then begin construction. The project team also completed all work scopes and closed out subproject CD-3C (Site Preparation) and implemented CD-3E (Long-Lead Procurements).

Key Outcome 4.2

The Key Outcome was met for FY 2024. The SRNS Tritium Finishing Facility Project successfully completed removal of an old warehouse-type structure and construction of a new warehouse to be used for storing components required to support on-going Tritium facility operations. SRNS also implemented a baseline change proposal to provide the plan to utilize an additional $35 million granted by Congress and approved by the President. This will support ongoing process system design. SRNS successfully completed the installation of 13.8kV tie-in to the Tritium Extraction Facility electrical systems to provide power to the H-Area New Manufacturing Facility.

Goal 5: Mission Leadership
SRNS Amount of At-Risk Fee Allocation: $4,176,386

Goal 5 Summary

SRNS earned a rating of Excellent, and 92 percent of the award fee allocated to this Goal. SRNS exceeded almost all the Objectives and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, accomplishments significantly outweighed issues, and no significant issues in performance existed.

Objective 5.1

SRNS leadership partnered effectively with NNSA to transition SRS landlord functions, drive tritium facility operational excellence, and remained highly engaged across the NSE to ensure readiness to implement plutonium pit production.

Objective 5.2

SRNS promoted a culture of critical self-assessments by identifying findings and opportunities for improvement, ranging from low-risk compliance issues to performance improvements to continuously improve. SRNS Quality Programs Managers implemented several programmatic updates to emphasize a heightened focus on the CAS, such as participating in several benchmarking efforts across the NNSA enterprise, collaborating on concepts that support EMDI, and continuously promoting accountability throughout their organization with their proactive initiatives and timely responses to performance decline. While SRNS CAS had programmatic strengths, there are still opportunities to further mature CAS to leverage it in driving improvements, programmatic discipline, and proactively preventing recurrences.

Objective 5.3

SRNS consistently established and maintained effective partnering relationships with SRFO, NNSA program offices, and NSE labs, plants, and sites that foster collaboration and shared mission success. This culture represents an environment where resources and technical capabilities from across the enterprise are leveraged to deliver tritium mission success and advance the effort to develop the capability to produce plutonium pits at SRS.

Objective 5.4

SRNS pursued collaborative efforts for continuous improvement and partnered with the Kansas City National Security Campus to develop an electronic data transmission service. SRNS actively managed risks with a robust Risk Management Program and advanced operational capabilities through Lean Six-

Sigma training and pilot programs. Continuous improvement initiatives across various areas resulted in accomplishing $4 million of additional scope within allocated resources.

Objective 5.5

SRNS leadership is proactively addressing Conduct of Operations (ConOps) before problems arise. Multiple initiatives have been developed and are being prepared for implementation by SRNS' Advancing ConOps Excellence (ACE) team. These continuous improvements are one facet of SRNS' multiprong Performance Improvement Sustainability Plan for ConOps.

Objective 5.6

SRNS continued innovative recruiting and retention efforts in FY 2024. SRNS' recruitment initiatives resulted in hiring Rad Con apprentices, filling IT positions, and achieving their headcount goals for critically needed engineering positions.

Objective 5.7

SRNS' Board of Directors reviewed management of the Tritium small projects, which resulted in several recommendations to increase the success of completing small projects within the baseline cost and schedule. SRNS initiated corrective actions to redefine roles and responsibilities, realign the small projects staff, increase analysis of metrics for earlier actions, and integrate operations early in the small project scheduling process. SRNS worked to implement the corrective actions to strengthen overall small project management performance. SRNS leadership positively contributed to the planning for a successful FY 2025 HCN/TCAP Outage.

Sub-CLIN 0007AA – SRPPF Project Management Performance Evaluation

Subjective Evaluation Factor 1: Effective Interactions and Timely Responses
SRNS Amount of At-Risk Fee Allocation: $2,880,634

Evaluation Summary

SRNS earned a rating of Very Good, and 90 percent of the award fee allocated to this SEF. SRNS exceeded many of the significant award fee criteria in this area. During the year, accomplishments greatly outweighed issues, and no significant issues in performance existed.

During the course of the year, NNSA noted improved SRNS responsiveness to monthly feedback. SRNS has been disciplined and forward-leaning in acknowledging issues identified by NNSA and provided written responses addressing these issues in monthly meetings. In addition, some functional groups provided more frequent and detailed updates to NNSA during routine interface meetings (e.g. engineering staff in weekly meetings). SRNS also provided their own written feedback report on a monthly basis. This report improved during the year from one that primarily identified accomplishments (with little context regarding the quality or timeliness of the achievements) to one that more self-critically examines performance.

SRNS responded rapidly and effectively to critical project impacts and opportunities driven by NNSA:

- Identification and implementation of additional safety significant controls to enhance facility worker safety.
- Development of a strategy for implementation of Program Requirements Document (PRD) Revision 4.
- Supported NNSA initiative to revise the project tailoring strategy to achieve CD-2/3 at less than final design (resulting in a potential schedule acceleration of approximately one year).

SRNS acknowledged the need for each of the above changes and worked in a collaborative, transparent, and expeditious manner to define scope and develop strategies for execution. For the first item, SRNS's Office of Engineering and Nuclear Safety completed a revision to the safety analysis in response to NNSA direction well ahead of the notional schedule put forward by NNSA and made subsequent changes to the derived controls based on further NNSA direction in a timely manner. This control set change has now been fully implemented in safety documents. For the second two items, SRNS engaged rapidly to identify the discrete impacts of the proposed changes and collaborated with NNSA to put plans in place that eliminated a potential negative impact to the project schedule (PRD Rev. 4) or maximized a potential schedule acceleration (early CD-2/3).
Additional examples of effective interactions and timely responses are:

- Prompt implementation of a recurring set of monthly project reporting meetings with specific content as directed by the NNSA Federal Project Director.
- Preparation for, and conduct of, interactions with the Defense Nuclear Facilities Safety Board.
- Support for the NNSA Council visit in January of 2024.
- Timely and attentive support to the Independent Cost Estimate Team for Y799 CD-3H and Y812 CD-3B packages.
- Prompt response to comments from NNSA reviewers (NA-SV, NA-94, and NA-ESH) on Revision 5 of the SRPPF Safety Design Strategy and the CD-3E/H/I Long Lead Procurement Safety Documentation.

- Technical Independent Project Review (TIPR) planning and support.
- Collaboration in the development of proposed Preliminary Documented Safety Analysis content supporting early CD-2/3.

Subjective Evaluation Factor 2: Effective Integrated Project Management
SRNS Amount of At-Risk Fee Allocation: $3,456,759

Evaluation Summary

SRNS earned a rating of Satisfactory, and 25 percent of the award fee allocated to this SEF. SRNS met few of the award fee criteria in this area. During the year, issues slightly outweighed accomplishments.

A primary factor influencing the rating in this fee area is the measured project performance over the performance period. The discrete Cost Performance Indicator (CPI) for FY 2024 was 0.79 and Schedule Performance Indicator (SPI) was 0.75. This was a significant reduction from FY 2023 for cost performance (0.93 CPI) and schedule performance (0.87 SPI). Additionally, SRNS and its subcontractors had a finish adherence of 47 percent in FY 2024. This is far below what is required to maintain the project finish date and the need for improved accuracy of finish adherence metrics remains as the current metrics are insufficient.

One of the most concerning indicators associated with less than adequate project management is evidenced by delays in the execution of critical long-lead procurement and construction activities (CD-3X scopes) following NNSA CD-3X approvals. These delays were experienced throughout the performance period. By definition, early work activities are critical to the completion of the project on the required schedule. The following critical early work scopes have taken greater than eight months from the time of NNSA CD-3X approval to the start of field execution:

- Y799-3E (Gloveboxes – no start in FY 2024).
- Y808-3A (Underground Site Work – field work started in September, 2024).
- Y863-3A (Sandfilter Mud Mat – no start in FY 2024).

Poor schedule quality continued to be an issue throughout the year. The project schedule used to drive project progress did not connect the scheduled work of the Government, the contractor, and external effort in a network of logically linked sequences of activities. Without establishment of the sequences and interdependencies of project activities for accomplishing the project objectives, the scheduling process does not support the integration of the project's scope, cost, and schedule to allow determination of the total work time and the Critical Path (CP). In particular, logical sequencing of design activities, procurement actions, permitting activities, and NNSA review and approval are lacking. The breadth of occurrence represents a systemic issue that prevents both the determination of CP and accountability for completion of required actions, increasing the risk to timely mission completion.

SRNS project reports have largely failed to fully address noted performance issues with recovery actions and actions to prevent recurrence. NNSA noted that Format 5 reports do not address the root cause, minimum threshold requirements, or provide a proper corrective action where necessary. In addition, every month, there are Format 5 reports that are late, according the SRNS Project Controls Reporting Business Rhythm. These are all requirements from the SRNS-PC-2009-0001 Rev16 Earned Value Management System (EVMS) Description. NNSA completed assessment 2024-SA-000388 (EVMS Variance and Corrective Actions) that resulted in two findings and four opportunities for improvement relating to the poor quality of overall project variance analysis. NNSA urged SRNS to use more lenient variance thresholds to reduce the number of Control Accounts flagged, allowing SRNS the ability to focus

on larger variances. The final assessment report was transmitted to SRNS on July 10, 2024; however, no noticeable improvements to the Format 5 reports were observed.

NNSA recognizes two significant accomplishments that occurred late in the performance period. First, SRNS made changes in project leadership that are expected to result in improved project management going forward. Second, SRNS delivered the project preliminary design in support of the TIPR review and the early CD-2/3.

Subjective Evaluation Factor 3: Effective Management of Business Systems
SRNS Amount of At-Risk Fee Allocation: $2,880,634

Evaluation Summary

SRNS earned a rating of Satisfactory, and 30 percent of the award fee allocated to this SEF. SRNS met few of the award fee criteria in this area. During the year, issues slightly outweighed accomplishments.

Deficiencies in the SRNS procurement processes resulted in negative impacts to critical project scopes of work. Examples include:

- Gloveboxes: NNSA consents to award Glovebox IDIQ's were provided early in FY 2024 (October 2023); however, the first task order award was not placed until January 2024. At the end of the performance period, SRNS had awarded only 15 of 29 task orders.
- Y810 Construction/Maintenance Building: When a contract for this design-build scope had not been awarded more than eight months after Y810 CD-2/3 approval, NNSA reassigned this project scope to the U.S. Army Corps of Engineers.
- Y863 CD-3A Sand Filter Mud Mat: Inaccurate estimate assumptions propagated into procurement documents resulting in vendor bids that exceeded the bounding values approved in the CD package, requiring rework.

Throughout the performance period, SRNS produced CD packages with content and quality issues. Despite SRNS investing a significant amount of time and effort to flowchart and improvements to the process for generation of CD packages, there were continuing instances of inadequate submittals throughout the performance period, including the Y799 CD-3I Glovebox Package (rejected due to issues such as schedule not aligned with estimate basis), Y808 CD-3B Long-Lead Procurement Safety Documentation with inconsistent/indeterminate scope definition, and lack of defined scope for CD-3E and CD-3H Glovebox packages.

The $9 billion award and transition of the project Engineering, Procurement, and Construction scope from SRNS to the CM subcontract was a significant effort for SRNS and is viewed as critically important to the successful execution of the project. NNSA directed this transition in October 2022 with conditional approval of the SRNS plan in December and full consent to award in March 2023 (based on the SRNS sole source justification submitted in February). Eighteen months later, although significant transition activity is complete, there are still transition activities in process, preventing full leveraging of the benefits:

- Although the CM submitted deliverables in accordance with the task order award schedules, project procedures are not fully implemented and integrated with SRNS procedures.
- Although a platform for a comprehensive project document repository was identified and largely populated, it is not yet the repository of record.
- A project Integrated Master Schedule to CD-4 has not been finalized.
- SRNS procurement actions have not been fully transitioned to the CM.

Subjective Evaluation Factor 4: Effective Management of Quality/Contractor Assurance
SRNS Amount of At-Risk Fee Allocation: $2,305,507

Evaluation Summary

SRNS earned a rating of Good, and 70 percent of the award fee allocated to this SEF. SRNS exceeded some of the award fee criteria in this area. During the year, accomplishments slightly outweighed issues and no significant issues in performance existed.

SRNS improved and sustained corrective action timeliness, reversing a negative trend of unsatisfactory timeliness (<90 percent) in the previous months. In January 2024, SRNS corrective action timeliness began trending upwards over 90 percent, and for the last six months of the performance period, it exceeded its target of 95 percent completion. Initiatives taken by the SRPPF CAS Program have been effective in meeting this goal.

SRNS demonstrated improvements in the performance of supplier qualification/re-qualification audits for the SRNS Qualified Suppliers List (QSL) in support of the SRPPF project. SRNS critically evaluated the effectiveness of supplier Quality Assurance programs for compliance to NQA-1-2019 and identified multiple findings, deficiencies, and observations. In one case, SRNS identified significant supplier issues, which resulted in the supplier removal from the SRNS QSL.
Notwithstanding these accomplishments, several improvement opportunities remain. Examples include:

- Failure to properly utilize Nonconformance Condition Report and design change processes where Pond 300 field modifications were found to be inconsistent with CM design drawings.
- Instances of poor document quality (e.g. inconsistencies and errors in monthly project artifacts).
- NNSA observations concerning the quantity and rigor associated with SRNS self-assessments.
- Corrective Action Plans developed in response to NNSA findings were of inconsistent quality.

Performance Based Incentives (PBIs) SRNS Amount of At-Risk Fee Allocation: $26,885,911		
PBI	**Incentive Fee Available**	**Incentive Fee Earned**
SRPPF.01: Main Process Buildings Subproject (Y799) Preliminary (60 percent) Design, Formal Design Review (FDR), and Preliminary Safety and Design Results	$9,872,350	$9,378,733
SRPPF.02: Complete Y799 Main Process Building Subproject Process Design 90 percent Complete and FDR – Merrick Scope	$5,721,478	$5,721,478
SRPPF.03: Y799 CD-3A: Complete Coatings Removal of Building 226-F, M Wing	$2,688,591	$2,688,591
SRPPF.04: Complete Site Preparation and Underground Utilities for areas N-3, S-1, S-5, and S-8	$2,150,873	$0
SRPPF.05: Y799 CD-3A: Complete D&R of Equipment and Commodities from All 226-F Construction Work Areas	$2,150,873	$2,150,873
SRPPF.06: Issue Bottoms-Up Estimate	$1,344,296	$1,344,296
SRPPF.07: Issue 60 percent Design Complete Estimate	$0	$0
SRPPF.08: Submit Y799 CD- 3E Process Equipment Package	$806,577	$806,577
SRPPF.09: Y799 CD-3C: Complete Fire Door Removals in Bldg. 226-F, M-Wing	$672,148	$672,148
SRPPF.10: Y799 CD-3C: Complete D&R of Wall Section in Building 226-F, M-Wing	$672,148	$672,148
SRPPF.11: Submit Y863 Sandfilter and Fanhouse CD-3A Package	$537,718	$537,718
SRPPF.12: Complete Design	$268,859	$0
Total	**$26,885,911**	**$23,972,562**

ATTACHMENT 1 – FY 2024 Performance Evaluation and Measurement Plan (PEMP)

Goal 1

Successfully execute the cost, scope, and schedule of the Nuclear Stockpile mission work for Defense Programs work in a safe and secure manner in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Objective 1.1

Work as a team across the Nuclear Security Enterprise on stockpile program scope to 1) achieve and maintain program delivery schedules; 2) lower risk to achieving First Production Unit (FPU), Initial Operational Capability (IOC), and Final Operational Capability (FOC); 3) improve manufacturability and supply chain execution; and 4) control costs.

Objective 1.2

Execute production modernization processes and activities per expectations defined in Implementation Plans to sustain and improve production capabilities, equipment, and infrastructure for 1) War Reserve production; 2) component modernization and production; 3) strategic materials capabilities and production; and 4) improve safety margins, technology maturation strategies, and qualification, and logistics plans collaboratively across the NSE; and 5) improve modeling and analysis capabilities to accurately measure production; and 6) Triad and SRNS collaborate on establishing NNSA's ability to produce 30 pits-per-year at LANL and 50 pits-per-year at Savannah River Site by enabling Knowledge Transfer supporting training for SRNS personnel, integrating with SRPPF for glovebox/equipment procurement, and sharing experiences and lessons learned on equipment design, fabrication and installation.

Objective 1.3

Execute stockpile system maintenance, production, limited-life component exchanges, weapon containers, surveillance, assessment, development studies/capability improvements, weapon program planning/support and dismantlement and disposition activities to meet DoD commitments and deliver the annual stockpile assessment.

Objective 1.4

Provide the knowledge and expertise to maintain confidence in the nuclear stockpile without additional nuclear explosive testing by developing, maturing, and applying innovative strategies and technologies to sustain a robust stockpile and improve science and engineering capabilities, facilities, and essential skills to support existing and future nuclear security enterprise requirements.

K.O. 1.1

Develop an executable comprehensive plan to achieve War Reserve rate production (50 ppy) which minimizes the time between CD-4 and the First Production Unit (FPU) by developing workforce competency plans, strategies for non-nuclear training using surrogate materials and the selection and

development of those materials, recording and implementing lessons learned, improving processes, and continuing to explore schedule acceleration opportunities by September 23, 2024.

Goal 2

Successfully execute the cost, scope, and schedule of the authorized global nuclear security mission work in a safe and secure manner to include the Defense Nuclear Nonproliferation, Nuclear Counterterrorism and Counterproliferation, and Incident Response missions in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Objective 2.1

Support efforts to secure, account for, and interdict the illicit movement of nuclear weapons, weapons-useable nuclear materials, and radioactive materials.

Objective 2.2

Support U.S. national and nuclear security objectives in reducing global nuclear security threats through the innovation of technical capabilities to detect, identify, and characterize: 1) foreign nuclear weapons programs, 2) illicit diversion of special nuclear materials, and 3) global nuclear detonations.

Objective 2.3

Support efforts to achieve permanent threat reduction by managing and minimizing excess weapons-useable nuclear materials, providing nuclear materials for peaceful uses, and executing plutonium disposition activities necessary to remove plutonium from SRS.

Objective 2.4

Support efforts to prevent proliferation, ensure peaceful nuclear uses, and enable verifiable nuclear reductions to strengthen the nonproliferation and arms control regimes.

Objective 2.5

Sustain and improve nuclear counterterrorism, counterproliferation, and forensic science, technology, expertise and associated Nuclear Emergency Support Team (NEST) capabilities; execute response missions, implement policies and procedures in support of response and forensics missions, and assist international partners/ organizations.

Goal 3

Not Applicable

Goal 4

Effectively and efficiently manage the safe and secure operations of SRS in accordance with cost, scope and schedule while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; successfully executing cyber, technical, informational, and physical security requirements, and assure mission commitments are met with high-quality products and services while partnering to improve the site infrastructure. Performance will be measured by the contractor's assurance system, NNSA metrics, cost control, business and financial operations, project baselines, implementation plans, assessment, and audit results, etc., with a focus on mission enablement.

Objective 4.1

Deliver effective, efficient, and responsive Environment, Safety, and Health (ES&H), Quality (including weapon quality) and radioactive waste management. Advance DOE/NNSA's climate resiliency and sustainability goals with a focus on maximizing energy efficiency and supporting Carbon Pollution-Free Electricity (CFE) objectives.

Objective 4.2

Deliver mission capabilities through the planning, design, acquisition, operation, maintenance, recapitalization, and disposition of facilities and infrastructure. Execute design and construction projects to achieve the scope on schedule and on budget.

Objective 4.3

Deliver effective, efficient, and responsive safeguards and security, including assigned enterprise initiatives.

Objective 4.4

Deliver efficient, effective, responsible, and transparent financial management operations and systems including financial integration reporting; budget formulation and execution; programmatic cost estimates; and internal controls.

Objective 4.5

Deliver efficient and effective management of legal risk and incorporation of best legal practices. Deliver timely and actionable recommendations and analysis to Freedom of Information Act and Privacy Act requests.

Objective 4.6

Deliver effective, efficient, and responsive information technology systems and cybersecurity that provides for a comprehensive mission and functional area delivery through the execution of the implementation factors established in the NA-IM IT and Cybersecurity Program Execution Guidance, and adaptive day-to-day IT and cybersecurity operations to support, protect, and defend mission/business systems and networks.

Objective 4.7

Deliver effective, efficient, and responsive site emergency management programs in support of the DOE/NNSA Emergency Management Enterprise.

Objective 4.8

Deliver efficient, effective, and compliant business operations including, but not limited to, procurement, human resources, and property systems, in support of NNSA missions. Focus areas to include achievement of small business and socioeconomic goals; timely and high-quality subcontract actions; support provided to the NSE Workforce Recruitment Strategy; and strategic management of integrated recruiting, retention, and diversity programs.

ATTACHMENT 1 – FY 2024 PEMP

K.O. 4.1

Surplus Plutonium Disposition (SPD) Project – Complete and submit the CD-2/3 package to support the ICE/EIR in accordance with the performance baseline schedule. (1st Qtr FY24)

K.O. 4.2

Tritium Finishing Facility (TFF) Project – Complete H-Area New Manufacturing (HANM) electrical scope to switch from the existing 13.8kV 3A feeder to the new 13.8kV 6A/6B feeders supporting the planned HANM outage and construction turnover to Operations of the new 233-38H Warehouse in accordance with the performance baseline.

Goal 5

Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, cultivating a Performance Excellence Culture that encompasses all aspects of operations and continues to emphasize safety and security, improving the responsiveness of SRNS' leadership team to issues and opportunities for continuous improvement internally and across the Enterprise, and parent company involvement/commitment to the overall success of SRS and the Enterprise.

Objective 5.1

Define and implement a realistic strategic vision for the SRS, in alignment with the NNSA Strategic Vision, which demonstrates enterprise leadership and effective collaborations across the NNSA enterprise to ensure DOE/NNSA success.

Objective 5.2

Demonstrate performance results through the institutional utilization of a Contractor Assurance System and promoting a culture of critical self-assessment, transparency, and accountability through the entire organization, while also leveraging parent company resources and expertise.

Objective 5.3

Develop and implement a National Security Enterprise-wide partnership model that enhances collaboration, reinforces shared fate, and enables mission success including transformation of the stockpile and the enterprise.

Objective 5.4

Exhibit professional excellence in performing roles/responsibilities while pursuing collaborative opportunities for continuous organizational and enterprise learning and demonstrated improvements that will improve productivity, grow the capacity to execute mission, and manage, rather than avoid, risk. Pursue innovations to increase agility and resilience while controlling costs. Advance the operational capabilities of the National Security Enterprise (NSE) by identifying and employing latent capacity existing in the NSE.

Objective 5.5

Demonstrate leadership in driving enhanced and sustainable formality and rigor of operations through proactive implementation of effective and efficient measures to minimize operational upsets that have potential to impact mission.

Objective 5.6

Leadership takes decisive action, as a cooperative partner of NNSA, to attract and retain the workforce needed to achieve the nuclear security enterprise missions, with particular emphasis on critical and under-resourced skill sets, reaching back to parent company resources as necessary.

Objective 5.7

Leadership executes program and project performance baselines utilizing defined roles, responsibilities, accountabilities, authorities, and processes with key SRNS subcontractors. Leadership should ensure these are understood across SRS and NNSA Enterprise.

ATTACHMENT 2 – FY 2024 SRPPF Award Fee Plan (AFP)

Subjective Performance Evaluation Factors:

1. Effective Interactions and Timely Responses

Contractor will ensure project issues identified by NNSA and/or Contractor(s), particularly those affecting safety, security, quality, and project performance, are promptly, effectively, and transparently addressed. Contractor will respond to issues identified by NNSA, including but not limited to assessment findings, reviews, and awareness activities within requested timeframes. Contractor shall notify the appropriate NNSA functional counterpart of Contractor identified issues and take appropriate project or contract actions to adequately address. Contractor will support NNSA in project related areas such as budget exercises, quarterly reviews, tours, etc. The Contractor demonstrates and meets the goals of the signed SRPPF Partnering Agreement dated February 16, 2022. (NNSA Document - "SRPPF Partnering Agreement - 2022.02.16").

2. Effective Integrated Project Management

The Contractor will sustain a fully integrated project organization focused on executing the SRPPF Capital Line-Item Projects in accordance with the project performance baselines and contract. This shall be done in a transparent and quality manner that is cost effective and on schedule. This includes a right-sized integrated organization with personnel empowered to lead change within a disciplined conduct of project management utilizing project management systems, processes and procedures aligned with Department of Energy Order 413.38, DOE/NNSA guides and industry standards. The Contractor's project management system, personnel and organization are competent, appropriately rigorous, integrated, and agile for large, complex and long duration projects.

This includes demonstrated performance that meets and/or exceeds planned productivity/production rates while actively integrating functional inputs into the design, procurement, and construction outputs. The Contractor will strive to minimize rework and idle time.

Contractor's Project Management Control System will as a minimum:

- Maintain a compliant Earned Value Management System (EVMS) and perform comprehensive internal reviews to ensure compliance during the SRPPF design phase.
- Implement corrective actions from DOE-HQ EVMS Reviews.
- Ensure overall project's performance reports capture accurate data and discuss at least monthly the project's status.
- Variances and resulting impacts to the projects shall be analyzed at least monthly and appropriate actions taken to mitigate significant variances.
- The trend program will identify, document, approve and implement working performance baseline changes in a timely manner.
- Maintain the project schedule to status design, procurement, technology development/integration fabrication, construction, assembly, test activities, commissioning and turnover of operations, as well as the critical path, on a regular basis.
- Implement forecast schedule changes incorporating awarded subcontractor approved schedules within a timely period from award of task order and complete work on schedule and within budget of work.

- Provide analysis to support development of impact-based decisions (i.e., date at which decisions need to be made to avoid impact, prioritization based on losses per day with lack of a decision, projections of quantities needed) to support recovery planning efforts.
- Update the Estimate at Completion monthly with control account managers' input and consideration of actual and projected cost and schedule variances/trends.
- Perform an annual Estimate at Completion in support of NNSA budgeting process.

3. Effective Management of Business Systems

Implement and sustain a set of efficient project business systems that align with the SRPPF project and Engineering Procurement Construction (EPC) organization and enable project execution including but not limited to financial management, contract management, human resource management, property management, informational management, document and record management, communication management and other performance. The SRNS SRPPF Business system(s) shall be implemented with clear roles and responsibilities, as well as established requirements, standards and practices. Implementation should address the integration of people, processes, and technology.

4. Effective Management of Quality/Contractor Assurance

Contractor will proactively promote and instill an integrated assurance system with a "Learning Organization and Continuous Improvement" culture by institutionalizing lessons learned within the SRPPF project for every functional area. Contractor will ensure all employees and project supporting organizations understand their responsibility for the quality performance of their work in accordance with the established project performance baselines. Contractor will identify Quality and Contractor Assurance Program concerns, findings and observations and properly address issues to promote continuous project improvement.

Principles outlined in the SRNS Program and Project Quality Assurance Plans, and a culture of "Learning Organization and Continuous Improvement" are flowed down to all organizations, processes, work product outputs, etc. Performance assessments and metrics are utilized to drive positive performance with a focus on timely completion of activities while doing it right the first time.

Contractor will integrate quality assurance throughout the design, procurement, construction and operational phases to effectively and efficiently capture, flow down, implement, and validate requirements. This is particularly important for nuclear safety and security related work products requiring key material and performance criteria to be implemented, documented, and validated.