National Nuclear Security Administration

FY2019 Performance Evaluation Summary

Contractor: Consolidated Nuclear Security, LLC (CNS)
Contract: DE-NA0001942
Evaluation Period: October 1, 2018 – September 30, 2019
Basis of Evaluation: Fiscal Year (FY) 2019 Performance Evaluation and Measurement Plan (PEMP)
The FY 2019 PEMP for this contract is available at:
https://www.energy.gov/sites/prod/files/2020/01/f70/FY19%20CNS%20PEMP%2092818%20Signed_Redacted.pdf
The Contract is available at: https://www.energy.gov/nnsa/nnsa-production-office-contract

Award Fee Scorecard

Goal	Rating		At Risk Available	Final
	Adjectival	Percent		
Goal-1: Manage the Nuclear Weapons Mission	*Very Good*	90%	$13,976,550	$12,578,895
Goal-2: Reduce Nuclear Security Threats	*Excellent*	95%	$5,989,950	$5,690,453
Goal-3: DOE & Strategic Partnership Projects Mission Objectives	*Excellent*	99%	$ -0-	$ -0-
Goal-4: Science, Technology & Engineering (ST&E)	*Excellent*	95%	$ -0-	$ -0-
Goal-5: Operations & Infrastructure	*Satisfactory*	50%	$11,979,900	$5,989,950
Goal-6: Leadership	*Satisfactory*	50%	$7,986,600	$3,993,300
Total Award Fee	***Good***	**70.8%**	**$39,933,000**	**$28,252,598**

In addition, the fixed fee and total fee summaries are provided below:

	Available	Final
Fixed Fee	$ -0-	$ -0-
SPP (Fixed Fee)	$1,270,000	$1,270,000
Total Fixed Fee	$1,270,000	$1,270,000
Total Fee (Award Fee and Fixed Fee)	**$41,203,000**	**$29,522,598**

Performance against the goals summarized below resulted in an overall rating of Good for CNS. CNS' performance was rated Very Good to Excellent in the mission delivery goals that account for 50% of the overall rating. However, this was offset in the remaining 50% by ratings of Satisfactory in the mission enabling and leadership goals which were characterized by the existence of significant performance issues and the failure to correct serious, longstanding performance problems that either introduced or perpetuated unacceptable risk to the overall operation of the NNSA.

Accomplishments:

Goal 1

- Achieved B61-12 Canned Subassembly First Production Unit more than 3 months ahead of schedule.
- Exceeded goals for Area 5 De-Inventory by removing 5.7 metric ton (MT) of material-at-risk; purified uranium metal and feeder material production; consolidation log casting; and briquetting.
- Provided all mission deliverables to the DOD for the W76-1 Life Extension Program (LEP); delivered all Canned Subassemblies (CSAs) and 88% of the accelerated baseline warhead deliverables For the W76-2 program.
- Met key objectives associated with Nuclear Facility Extended Life Programs, target working inventory, 9212 Transition Strategy, Enterprise Modeling Analysis Consortium, depleted uranium program planning, and microwave casting risk reduction.
- Met overall FY19 salvage, material, technology development, and process equipment recapitalization milestones.
- Produced over 1,500 kg of purified Lithium Chloride through wet chemistry process.

Goal 2

- Exceeded annual metric for highly enriched uranium (HEU) dispositioned by more than 1 MT.
- Delivered the final HEU shipment in support of the Repurposed Excess Uranium down-blend contract ahead of schedule.
- Exceeded the schedule to deliver surplus HEU for the Down Blend Offering for Tritium (DBOT).
- Successfully executed the removal of more than 350 kg of HEU, including one of the largest shipments in the Remove Program history from a key partner in Europe; the first HEU shipment from Kyoto University; and a HEU shipment from Canada.
- Provided exceptional support to the Emerging Threats Program, including leading a first-ever uranium precipitation training event for Mobile Uranium Facility (MUF) personnel.
- Completed Portal Monitor for Authentication and Certification demonstration project.

Goal 3

- Feedstock deliveries for Naval Reactors were packaged and delivered ahead of schedule and all FY19 castings were completed.
- Exceeded the stretch goal for oxide production for the High Flux Isotope Reactor.
- Provided storage for certified reference material to support transfer of material from Argonne National Laboratory and Department of Homeland Security.
- Produced, packaged, and shipped HEU metal to a fabricator for medical isotope production.
- Completed a Depleted Uranium-Molybdenum safety block casting for the White Sands Missile Range Fast Burst Reactor Upgrade Project.

Goal 4

- All deliverables are on or ahead of schedule.
- 41 new/54 ongoing Plant Directed Research & Development projects on-track for completion.
- Achieved advances in Additive Manufacturing (AM), including enhancements within requirements for density of AM for mock materials.
- Designed and procured GEN II Cell in support of the direct electrolytic reduction project, and designed and installed GEN IV Cell in support of the electrorefining project.
- Enhanced digital transformation capabilities to include developing an improved approach towards the utilization of streak and framing cameras as the primary methods of data collection for High Explosive surveillance shots.

- Deployed pilot of Strategic Technology Transition Plan process on complex alternate material technology project to ensure successful development and transition to Production.
- Developed and deployed predictive analytical tools to support maintenance reliability, financial, and human resources data models.

Goal 5

- Reduced the backlog of Unreviewed Safety Question determinations.
- Received operational release authorization for the High Explosive Pressing Facility
- Completed integration of Computerized Maintenance Management System integration with BUILDER facility condition software.
- Played a key role in helping NNSA achieve DOE HQ's sustainability goals to help lead the way in clean energy and energy efficiency and received the Sustainability Champion Award.
- Successfully completed an Office of Enterprise Assessment multi-topic security assessment.
- Pantex Plant successfully executed a multi-agency Nuclear Weapons Accident/Incident Exercise.
- A Nuclear Security Enterprise (NSE) leader in development of area plans for strategic planning.

Goal 6

- Recognized for demonstrated leadership focus and initiative in solving NSE problems.
- Proactively engaged NNSA program managers with innovative options to mitigate component manufacturing delays.

Issues:

Goal 1

- Proactive identification of potential material accumulation challenges resulted in a missed milestone for Lathe #1 installation at 9215
- Fabrication, testing, and operational readiness of the Contaminated Chip Cleaning Cart were not completed due to fabrication delays and identification of criticality safety evaluation issues.
- Material Conversion Equipment Refurbishment continues to be negatively impacted by cost increases and schedule delays.
- Inability to obtain/maintain sufficient human resources negatively impacted projects; operational pauses and the unavailability of numerous production technicians further impacted productivity.

Goal 2

- CNS corrective actions planned in response to an issue identified by NNSA related to processing and transferring foreign-obligated uranium were slower than expected, and formal work processes are still incomplete.

Goal 5

- NNSA lost confidence in CNS' ability to implement an effective IT/CyberSecurity (IT/CS) program due to declining performance.
- NNSA identified a wide range of new and repetitive IT/CS program problems highlighting CNS' failure to permanently correct critical cybersecurity performance issues which negatively impact mission support and introduce unnecessary and unacceptable risk to the NSE.
- A negative conduct of operations (CONOPS) trend resulted in violations of Technical Safety Requirements (TSR), Nuclear Explosive Safety (NES) requirements, criticality safety requirements, damage to key weapon components and threatened mission delivery.
- Formality of operations issues have resulted in recurring problems and lack of follow up on corrective measures has led to repeat incidents.
- Nuclear Safety at Pantex and Nuclear Criticality Safety (NCS) at Y-12 have performance issues necessitating further improvement.

- Improvements are needed to reduce injuries, hazardous material exposures, and vehicle incidents.
- CNS accepted nonconforming material on the Calciner project without following proper inspection protocols including those required for Nuclear Quality Level "Q" items.
- Mismanagement of overtime and fundamental timekeeping processes resulted in significant overcharges, additional cost, and reduced productivity.

Goal 6

- CNS leadership failed to correct significant longstanding performance issues in multiple high risk areas including cybersecurity and conduct of operations resulting in security and criticality safety violations.
- CNS leadership and oversight processes failed to timely identify and address serious overtime and time keeping irregularities resulting in overcharges, reduced productivity, and the unavailability of numerous critical production technicians.
- CNS leadership failed to correct serious cybersecurity discrepancies while performance in this critical area continued to degrade resulting in an unacceptable level of risk.
- Leadership attention is necessary to improve technical security program implementation, COMSEC, and continue improvements in information security; effect appreciable reduction in Human Reliability Program participants; and reduce the trend in Incidents of Security Concern.