National Nuclear Security Administration

FY2020 Performance Evaluation Summary

Contractor: Consolidated Nuclear Security LLC
Contract: DE-NA0001942
Evaluation Period: October 1, 2019 - September 30, 2020
Basis of Evaluation: Fiscal Year (FY) 2020 Performance Evaluation and Measurement Plan (PEMP)
The FY 2020 PEMP for this contract is available at:
https://www.energy.gov/sites/prod/files/2020/11/f80/FY20%20CNS%20PEMP%2092419.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: Mission Execution: Nuclear Weapons	Very Good	90%	$13,976,550	$12,578,895
Goal-2: Mission Execution: Global Nuclear Security	Excellent	95%	$5,989,950	$5,690,453
Goal-3: DOE & Strategic Partnership Projects Mission Objectives	Excellent	95%	$0	$0
Goal-4: Science, Technology & Engineering (ST&E)	Excellent	95%	$0	$0
Goal-5: Mission Enablement	Very Good	80%	$11,979,900	$9,583,920
Goal-6: Mission Leadership	Excellent	91%	$7,986,600	$7,267,806
Total Award Fee	**Very Good**	**88%**	**$39,933,000**	**$35,121,074**

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

	Available	Final
Fixed Fee	$0	$0
SPP (Fixed Fee)	$1,522,795	$1,522,795
Total Fixed Fee	$1,522,795	$1,522,795
Total Fee (Award Fee and Fixed Fee)	**$41,455,795**	**$36,643,869**

Overall, CNS earned a Very Good rating for FY2020, exceeding many of the objectives and key outcomes under the PEMP goals, meeting overall cost, schedule, and technical performance requirements with accomplishments that greatly outweigh issues.

CNS performed very well executing mission activities under Goal 1, specifically in meeting/exceeding deliverables while effectively managing COVID-19 response and protecting employees at both Pantex and Y-12. First Production Capability Units were completed for both the B61-12 and W88 Alt 370 programs to reduce risk to First Production Unit schedules. Progress in re-establishing binary capability at Y-12 is also commendable. CNS worked collaboratively across the Nuclear Security Enterprise to accommodate and manage product deliverables and production challenges. CNS provided excellent support for both the planning and execution of multiple nuclear material removal campaigns from several countries and providing enriched uranium in support of High Performance Research Reactor project,

Down Blend Offering for Tritium (DBOT) Project, and highly enriched uranium for high assay low enriched uranium demonstrating excellent performance in Goal 2. CNS supported both DOE and other government entities through computed tomography of High Flux Isotope Reactor fuel elements, achievement of major milestones for the White Sands Missile Range/Fast Burst Reactor Upgrade project, and management of the NBL Center including shipment of Certified Reference Material. Substantive progress was made in maturing uranium and lithium technologies. Of note is the first production size uranium button using electrorefining technology and production of lithium chloride. CNS improved and sustained safety and security performance and made significant improvements in the Pantex Safety Basis. CNS COVID-19 response and performance is particularly notable in quickly standing up contract tracing, testing capability, and COVID protections to support continuation of NNSA missions. With new leadership in Cyber Security and Information Technology, CNS has sustained improvement through the latter half of the year. Project performance has noted opportunities for improvement in planning, cost management, and vendor management. CNS demonstrated excellent leadership throughout the COVID-19 response and worked collaboratively across the NSE with establishing and managing the uranium, depleted uranium, and lithium models and special materials integrated schedule and facilitating mission achievement across the NSE. In response to a trend of lapses in disciplined operations, CNS established the Disciplined Operations Council. Leadership focus must continue to ensure effectiveness of improvement actions.

Accomplishments:

Goal 1

- Completed 99% of FY20 weapon deliverables, and exceeded deliverables for Canned Subassemblies (CSAs) while successfully mitigating COVID-19 impacts at both plants.
- Completed the B61-12 First Production Capability Unit that successfully demonstrated assembly activities.
- For Uranium Modernization, successes include restarting the binary rolling operations for the first time in over 15 years, deactivating systems in Building 9206 ahead of schedule, and reducing the number of enriched uranium items in inventory.
- For Secondary Stage Production Modernization, CNS developed and baselined an integrated schedule for enriched uranium, lithium, and portions of the Depleted Uranium program.
- Removed material-at-risk from Area 5 and isolated out-of-service systems in Building 9212.

Goal 2

- Provided excellent planning and execution of multiple nuclear material removal campaigns from several countries.
- Shipped 154 kg surplus highly-enriched uranium (HEU) in support of the HEU Dispose Program and DBOT project.
- Completed 25 consolidation castings, used as an HEU feed source for high-assay low-enriched uranium (LEU).
- Completed 54 LEU castings, allowing for sufficient quantity on hand to meet all FY20 customer needs.
- Discarded 130 items, exceeding the revised FY20 goal despite impacts from suspension of shipments.

Goal 3

- Feedstock deliveries for Naval Reactors were packaged and delivered on schedule and all castings were completed.
- Exceeded the oxide production goal for HFIR.
- Exceeded the Li6 carbonate production goal for Office of Science.
- NBL Center successfully executed 45 shipments of certified reference materials (CRMs) and completed the final transfer of more than 10,000 CRMs from the former NBL since 2018.
- Fast Burst Reactor Upgrade Project completed the physical vapor deposition facility and the #1 and #2 Enriched Uranium safety blocks.

Goal 4

- Completed the vacuum induction melt portion of pencil electrode preparation for synthesis of nuclear material ahead of schedule.

- Generated thousands of feet of wire for Y-12 and LANL experiments using Depleted Uranium wire making capability.
- Increased High Explosive machining limits to allow for faster machining using lathing and drilling operations at substantial cost savings.
- Constructed a Faraday cage at Pantex to determine if indirect effects of lightning could be sufficiently reduced to conduct operations during lightning warnings.

Goal 5

- CNS leadership, planning, and execution led to seamless mission critical operations during COVID-19 response.
- Expedited IT hardware, virtual private network slots, and software to assist in the transition to telework.
- Provided outstanding support to the NSE Workforce Recruitment Strategy Group to improve diversity and technical candidate pools and negotiated three labor agreements without impacting mission.
- CNS achieved validated cumulative cost savings of over $750M through FY19.
- Completed Bay and Cell HPFL lead in commitments.
- Removed beryllium contamination from a total area of more than 78k ft^2
- Completion of the fifty-year sprinkler head replacements at Y-12

Goal 6

- Response to COVID-19 demonstrated exceptional innovation and resiliency. CNS developed recovery plans, tracked employee statistics, developed training, communicated and implemented Coronavirus Aid, Relief, and Economic Security Act policies, deployed enduring IT capabilities to support nearly 3,400 remote users in only two weeks, and collaborated across the NSE.
- Completed 99% of Tier 1 weapon deliverables by partnering with the NSE to realign scope and schedule and successfully apply personnel to maximize production.
- Pantex/Y-12 Strategic Plan transparently identified opportunities and threats to mission delivery, demonstrated integration across the NSE, and included current COVID-19 lessons learned.

Issues:

Goal 1

- Behind baseline schedule slightly for some Pantex activities that included dismantlements and W76 rebuilds due to resource availability.
- Continues to struggle with production modernization small projects, Calciner project, Direct Chip Melt furnace delays, and the Material Conversion Equipment Refurbishment project.

Goal 5

- Pantex dosimetry has not been restored to full functionality
- Cybersecurity improved in 2020 but additional efforts must continue in 2021 to reach full performance.
- Inadequate planning and increases to some total project cost and schedules.
- Enterprise wide coordination related to special material maturation.
- Under performance of some Recapitalization and production modernization projects.
- Four line item projects below expectations.

Goal 6

- CNS leadership must continue focus in improving disciplined operations to ensure actions are effective in minimizing the frequency and significance of events.