National Nuclear Security Administration

FY2020 Performance Evaluation Summary

Contractor: National Technology and Engineering Solutions of Sandia, LLC (NTESS)
Contract: DE-NA0003525
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%20NTESS%20PEMP_Redacted.pdf
The Contract is available at: https://www.energy.gov/nnsa/sandia-national-laboratories-contract

Award Fee Scorecard

Goal	Rating		At Risk Available ($M)	Final ($M)
	Adjectival	Percent		
Goal-1: Mission Execution: Nuclear Weapons	Very Good	87%	$3,244,951	$2,823,108
Goal-2: Mission Execution: Global Nuclear Security	Excellent	95%	$811,238	$770,676
Goal-3: DOE & Strategic Partnership Projects Mission Objectives	Excellent	99%	$0.00	$0.00
Goal-4: Science, Technology & Engineering (ST&E)	Excellent	100%	$0.00	$0.00
Goal-5: Mission Enablement	Very Good	89%	$2,433,714	$2,166,005
Goal-6: Mission Leadership	Very Good	85%	$1,622,476	$1,379,105
Total Award Fee	**Very Good**	**88%**	**$8,112,379**	**$7,138,894**

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

Fee	Available ($M)	Final ($M)
Fixed Fee	$20,280,947	$20,280,947
SPP (Fixed Fee)	$11,223,000	$11,223,000
Total Fixed Fee	$31,503,947	$31,503,947
Total Fee (Award Fee and Fixed Fee)	**$39,616,326**	**$38,642,841**

NTESS earned an overall rating of Very Good during this performance period. NTESS earned Excellent ratings for Goals 2, 3, and 4, and Very Good ratings for Goals 1, 5, and 6. NTESS exceeded 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.

Accomplishments:

Goal 1

- Successfully completed all required weapon system maintenance, critical stockpile surveillance, and qualification tests to support the annual stockpile assessment (Cycle 24) on the Getting the Job Done List (GTJDL).

- Successfully supported the W88 Alt 370 and B61-12 LEP First Production Capability Unit (FPCU) builds at Pantex, enabling NNSA to achieve FPCU and reduce risk to First Production Unit (FPU) and follow-on rate productions.
- Proactively prioritized the Mobile Guardian Transporter (MGT) and successfully completed the series of planned normal environment tests and crash test on the first MGT prototype.
- Obtained important experimental nuclear sciences data by advancing pulsed power experimental capabilities.
- Moved the Vanguard advanced technology prototype system to the classified network, achieving the Tri Lab level 1 milestone to enable testing of weapon codes from all three NNSA labs.

Goal 2

- Effectively supported nuclear, radiological, and physical security projects for domestic and international programs during the COVID-19 pandemic.
- Led the integration of operational payloads onto DoD satellites for the space-based nuclear detonation detection program, and supported two GPS launches of the Global Burst Detector payloads.
- Provided critical expertise in designing, planning, sustaining, and installing radiation detection system upgrades in Malaysia.
- Adapted to the restricted travel environment due to the COVID-19 pandemic by revising foreign partner engagement strategies and identifying ways to engage remotely on export control outreach.
- Provided on-call, responsive, and value-added information analysis to inform DOE/NNSA leadership as they developed counterterrorism and counterproliferation policy and recommendations.

Goal 3

- Completed an assessment of critical utility-scale electrical components in response to Executive Order 13920, which called for securing the U.S bulk-power system.
- Provided rapid solutions to the DOE National Virtual Biotechnology Laboratory in support of the global health pandemic.
- Provided rapid geotechnical assessments to the DOE Office of Fossil Energy in response to the Presidential Directive to fill the U.S Strategic Petroleum Reserve, mitigating national economic impacts during the pandemic.
- Accomplished a major DOE goal to improve vehicle engine efficiencies through discoveries in fluid motion and reaction chemistry dynamics that control ignition in modern diesel engines.
- Successfully conducted a high visibility hypersonic flight test that demonstrated the technology, highlighting its tremendous potential as a future U.S mission capability.

Goal 4

- Leveraged Science, Technology & Engineering capabilities to support NNSA mission priorities in Research Development Testing & Evaluation (RDT&E) of science-based stockpile stewardship, as well as DOE and other federal agency missions.
- Demonstrated improved yields and reproducibility of warm x-ray sources in the Z facility, increasing confidence in the experimental data related to hostile survivability studies.
- Leveraged technical competencies of the laboratories in response to the global health pandemic by providing numerous and impactful solutions to help counter and respond to the COVID-19 pandemic.
- Recognized for its noteworthy efforts by receiving two Federal Laboratory Consortium (FLC) Excellence in Tech Transfer Awards, an FLC Impact Award, an FLC Outstanding Tech Transfer Professional Award, and the DOE Technology Transfer Working Group Best in Class Award.

Goal 5

- NTESS achieved substantial completion of the 20th/G Road Intersection Project ahead of schedule while minimizing impacts to the workforce.
- Partnered with NNSA to meet multiple objectives of the Enhanced Minor Construction Commercial Standards pilot program to streamline the acquisition approach for projects between $20M - $50M.
- Shipped 11 shielded container assemblies of transuranic (TRU) waste from the Auxiliary Hot Cell Facility to the Waste Isolation Pilot Plant (WIPP) to comply with the New Mexico Environment Department Site Treatment Plan, reducing TRU waste containers in the facility by 44%.

- Led an NNSA-wide mission growth analysis that identified major funding gaps in security programs, enabling NNSA leadership to make more informed funding decisions for security programs across the enterprise.

Goal 6

- Displayed outstanding leadership in support of the nuclear security enterprise and the overall national response to the pandemic.
- Served as the co-lead of the NSE Workforce Recruitment Strategy Group, facilitated transforming the NSE recruiting events to virtual events in response to the COVID-19 pandemic restrictions, to include the first NNSA/NSE job fair.
- Garnered NNSA's first-ever approval of an Alternative Methodology (AM) for completing a Documented Safety Analysis (DSA), recognized as a "Landmark approval granted to SNL reactor facilities."

Issues:

Goal 1

- Did not adequately manage specific production streams for the B61-12 and W88 Alt 370 programs, resulting in cost overruns.
- Experienced multiple B61-12 component baseline production delays, increasing risk to meeting full-rate production.

Goal 3

- (SPP) Encountered production issues during the Application Specific Integrated Circuit (ASIC) packaging process for the Mk21 Fuze.

Goal 5

- Did not integrate multiple disciplines to consistently ensure mission support requirements were being met early in the facility planning process.
- Did not properly comply with environmental requirements prior to beginning outdoor construction.
- Continued to experience a lack of formality in operations at Technical Area-V, though some improvements have been realized.
- Progressed in developing a comprehensive vision and system for emergency management, though improvements have yet to be fully realized.

Goal 6

- Experienced a significant reduction in Annular Core Research Reactor operational availability due to uncertainties related to safety systems and issues with Safety Management Programs.
- Experienced a high volume of unauthorized network based transmission incidents where a Derivative Classifier review did not occur, increasing risk of information loss.