



FY2021 Performance Evaluation Summary

Contractor: Mission Support and Test Services, LLC (MSTS)

Contract: DE-NA0003624

Evaluation Period: October 1, 2020 – September 30, 2021

Basis of Evaluation: Fiscal Year (FY) 2021 Performance Evaluation and Measurement Plan (PEMP)

The FY 2021 PEMP for this contract is available at: <https://www.energy.gov/nnsa/articles/msts-fy21-pemp-9-2-2020f>

The Contract is available at: <https://www.energy.gov/nnsa/nevada-national-security-site-contract>

Award Fee Scorecard

Goal	Rating		At Risk Available	Final
	Adjectival	Percent		
Goal-1: Mission Execution: Nuclear Weapons	Very Good	90%	\$ 7,320,656	\$ 6,588,590
Goal-2: Mission Execution: Global Nuclear Security	Very Good	90%	\$ 4,880,437	\$ 4,392,393
Goal-3: DOE & Strategic Partnership Projects Mission Objectives	Excellent	91%	\$ -0-	\$ -0-
Goal-4: Science, Technology & Engineering (ST&E)	Excellent	100%	\$ -0-	\$ -0-
Goal-5: Mission Enablement	Very Good	83%	\$ 7,320,656	\$ 6,076,144
Goal-6: Mission Leadership	Very Good	87%	\$ 4,880,437	\$ 4,245,980
Total Award Fee	Very Good	87.3%	\$24,402,185	\$21,303,108

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

	Available	Final
Fixed Fee	\$ -0-	\$ -0-
SPP (Fixed Fee)	\$ 2,201,439	\$ 2,201,439
Total Fixed Fee	\$ 2,201,439	\$ 2,201,439
Total Fee (Award Fee and Fixed Fee)	\$26,603,624	\$23,504,547

MSTS commitments to the NNSA continued from FY2020 for increasing operational cadence on experiments, enhancing capabilities to execute an expanded program portfolio, improving project management, and significantly improving the Nevada National Security Site (NNSS) infrastructure. MSTS mission execution was impacted by the COVID-19 pandemic, but it was minimized by prompt and decisive COVID-19 pandemic planning and response. Due to the MSTS good relationship with the Southern Nevada Health District, vaccination receipt and distribution to the NNSS workforce lead the National Security Enterprise. MSTS continued to implement alternate work arrangements to maximize the safety of personnel while continuing to successfully support Department Primary Mission Essential Functions (PMEFs), Mission Essential Functions (MEFs) and NNSA high-priority mission activities assigned to NNSS.

Overall, MSTS earned a Very Good rating for FY2021, 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.

Accomplishments:

Goal 1

- Successfully supported four Subcritical Experiment (SCE) series simultaneously, including execution of three SCEs in a single year
- Demonstrated 6' vessel fit test at U1a, started Entombment drift mining, completed mining of the U1a.108 drift; and re-established ZEUS at NNSS (from North Las Vegas) in support of the ECSE
- Achieved five (5) firsts in diagnostic development vastly improving data recovery/quality for the Nuclear Security Enterprise Laboratories
- Executed nine (9) JASPER experiments for certification and R&D
- Executed Short-Stack and Legacy Fragmentation experiments

Goal 2

- Provided outstanding laboratory/customer integration for experiments and testbed operations
- Executed Low Yield Nuclear Monitoring experiments with first time data collects using SCEs
- Achieved operating capability to safely conduct UAS operations; safely & securely executed several series of experiments
- Provided outstanding support to the repatriation and disposal of three radioisotope thermoelectric generators containing U.S. origin Sr-90 that were located in France
- Provided excellent response in support of real-world national security events requiring significant multi-agency pre-planning and extensive coverage before, during, and after each of the events
- Successfully executed two (2) over 50-person Diamond Thunder exercises under COVID protocols

Goal 3

- Collaborated with EM, NNSA, and State of Nevada (NDEP) to successfully develop a Settlement Agreement in response to FY2020 notices of noncompliance from the U.S. Environmental Protection Agency and NDEP on waste characterization and disposal of the Y-12 wastes at the NNSS
- Leveraged successful SPP/SIPP work into NNSA missions
- Supported multiple government agencies by providing nearly 100% data recovery for immediate use in the national & international security community
- Trained first responders via several platforms; conducted ~110% of stated certifications and trained 6,247 first responders (Counter Terrorism Operations Support)
- Supported the national security complex and legacy cleanup waste disposal through successful operation of the Radioactive Waste Management Complex & continued to support environmental characterization activities at the NNSS
- Successfully coordinated and completed the three-year disposal project of three radioisotope thermoelectric generators repatriated from France, reducing risk and liability for both the U.S. and French governments

Goal 4

- Received a 2020 R&D 100 award for the X-ray Polarizing Beam Splitter
- Finalist for the FedTech Startup Studio 2021 for the MSTS Electromagnetic Spectrum Management System developed under the Site Directed Research & Development (SDRD) Program
- Awarded 37 new FY21 SDRD projects/feasibility studies (~20% increase over FY20 from efficiencies in awarding/scheduling funding for projects)
- ~30% of MSTS SDRD projects accepted for use in numerous national security programs
- Continued more than 20 active collaborations between SDRD, NNSA mission programs, universities, and special partnership projects to enhance the STEM pipeline for recruiting and retention
- Completed a new R&D partnership agreement with Kansas City National Security Complex (KSNCS) and the University of Missouri (a 1st of its kind collaboration of SDRD and PDRD)
- Entered into MSTS' first Cooperative R&D Agreement (CRADA)

Goal 5

- Led the entire DOE Complex to offer COVID vaccinations to the NvE Community
- Continued outstanding COVID-19 response for the NvE Community
- Led the NNSA Complex in Design Basis Threat Implementation for Defense Nuclear Security
- Received High-Performance Sustainable Building (HPSB) Certification for Mercury Building 23-460
- Provided outstanding response and excellent collaboration with Other Government Agencies (BLM, AF) for the unprecedented, hazardous 23,000-acre NNSC Cherrywood Fire, as well as other very significant summer fires
- Performed well in the DOE independent cyber assessment and 6 other independent cyber audits
- Submitted more than double the number of safety basis documents than any other year
- U1a Complex Enhancement Project (UCEP) Subproject 010 is on budget and on schedule
- Awarded 138 kV Power Transmission System Replacement (PTSR) Project Firm Fixed Price contract

Goal 6

- Continued decisive leadership of the COVID pandemic to protect employee health, executed all PMEFs, MEFs and high priority activities; and exhibited strong leadership with NNSC partners
- Continued to demonstrate strong ownership of the NvE integration role to enhance communications supporting the safe, secure, efficient, and effective mission execution through interactions
- Provided parent company reachback for expertise in nuclear safety, design engineering, water distribution engineering, asset management, mining, and external assessments to improve processes
- Supported NNSC on the Nuclear Security Enterprise Recruitment Strategy Group and Governance Peer Review
- Collaborated with the local community (i.e., monetary donations NTS Historical Foundation, Opportunity Village) and primary education and state-level Nevada universities to support STEM as well as enhance the employee pipeline

Issues:Goal 1

- Fire protection and seismic requirements remain problematic for the UCEP 020 Project design and could negatively impact both cost and schedule (see also Goal 5)

Goal 2

- Improvement is required in project management to develop accurate cost estimates, plans, and effective project controls to successfully execute new projects
- Improvement is required in planning and coordination to accommodate multiple future missions in U12P and deliver an integrated schedule and a mission risk analysis

Goal 3

- Need to develop a process for integrated classified matter and a classified waste disposition approach
- Improvement is required in quality & timely Documented Safety Analysis submittal and financial reporting

Goal 5

- Capital Line Item Projects: UCEP 020 is over budget and behind schedule and ASD is under budget and behind schedule; EVMS Certification is also behind schedule
- Continued improvement required for construction project management, estimating and execution, integration of SMEs as well as the quality and timeliness of work planning, conduct of operations, safety basis development, fire protection, procurement, and other safety management program implementation

Goal 6

- Continued management attention is required for UCEP and ASD capital projects and other construction projects
- CAS maturity needs to include demonstrated effectiveness of the actions taken