FY2020 Performance Evaluation Summary

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

**Contract:** DE-NA0003624

**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%20MSTS%20PEMP%2091919.pdf

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

### Award Fee Scorecard

<table>
<thead>
<tr>
<th>Goal</th>
<th>Rating</th>
<th>At Risk Available</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal-1: Mission Execution: Nuclear Weapons</td>
<td>Very Good</td>
<td>90%</td>
<td>$5,575,989</td>
</tr>
<tr>
<td>Goal-2: Mission Execution: Global Nuclear Security</td>
<td>Very Good</td>
<td>90%</td>
<td>$3,717,326</td>
</tr>
<tr>
<td>Goal-3: DOE &amp; Strategic Partnership Projects Mission Objectives</td>
<td>Excellent</td>
<td>95%</td>
<td>$-0-</td>
</tr>
<tr>
<td>Goal-4: Science, Technology &amp; Engineering (ST&amp;E)</td>
<td>Excellent</td>
<td>100%</td>
<td>$-0-</td>
</tr>
<tr>
<td>Goal-5: Mission Enablement</td>
<td>Very Good</td>
<td>85%</td>
<td>$5,575,989</td>
</tr>
<tr>
<td>Goal-6: Mission Leadership</td>
<td>Very Good</td>
<td>88%</td>
<td>$3,717,326</td>
</tr>
<tr>
<td><strong>Total Award Fee</strong></td>
<td><strong>Very Good</strong></td>
<td><strong>88.1%</strong></td>
<td><strong>$18,586,630</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Available</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Fee</td>
<td>$-0-</td>
<td>$-0-</td>
</tr>
<tr>
<td>SPP (Fixed Fee)</td>
<td>$2,282,974</td>
<td>$2,282,974</td>
</tr>
<tr>
<td>Total Fixed Fee</td>
<td>$2,282,974</td>
<td>$2,282,974</td>
</tr>
<tr>
<td><strong>Total Fee (Award Fee and Fixed Fee)</strong></td>
<td><strong>$20,869,604</strong></td>
<td><strong>$18,657,795</strong></td>
</tr>
</tbody>
</table>

MSTS commitments to the National Nuclear Security Administration (NNSA) continue from FY2019 for increasing operational cadence on experiments, enhancing capabilities to execute an expanded program portfolio, and significantly improving the Nevada National Security Site (NNSS) infrastructure. However, during this year, MSTS execution was impacted by the COVID-19 pandemic. MSTS acted promptly and decisively in the early stages of the COVID-19 pandemic implementing alternate work arrangements to maximize the safety of personnel while continuing to support Department Primary Mission Essential Functions (PMEFs), Mission Essential Functions (MEFs) and NNSA high-priority mission activities. As the year progressed, MSTS successfully transitioned to normal operations with maximum telework implementing required COVID-19 restrictions with minimal impact to the health and safety of the workforce while meeting PMEFs and MEFs, and executing other essential activities.
Overall, MSTS 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.

Accomplishments:

Goal 1
- Engaged with LANL, LLNL, and SNL to validate the appropriate design requirements for the U1a Complex Enhancements Projects (UCEP) project and minimize impact to the Enhanced Capability for Subcritical Experiments/Advanced Sources and Detectors (ECSE/ASD) program
- Successfully supported four Subcritical Experiments (SCE) series simultaneously
- Developed strategies (to minimize impacts of required maintenance activities at Device Assembly Facility and U1a on the NNSA programs
- Vastly improved data recovery & quality for NNSA experimental programs through first of a kind diagnostic developments

Goal 2
- Successfully implemented COVID-19 sequestration program to maintain PMEF-2 requirements
- Supported extensive CONUS and OCONUS growth of the Emergency Communications Network (ECN) and successfully transitioned to Switch Facility
- Supported the Mars Perseverance Rover launch
- Conducted multiple foreign visits to support the Defense Nuclear Nonproliferation (DNN) mission area of protecting and removing radioactive material, including leading alternative technology projects
- Provided outstanding laboratory/customer integration for experiments and testbed operations
- Supported University of Nevada-Reno in real-time seismic data collection of the Tonopah earthquake

Goal 3
- Supported Departments of Defense and Homeland Security, and Defense Threat Reduction Agency by providing nearly 100% data recovery for immediate use in the national & international security community
- Trained first responders; conducted 125% of stated certifications in 75% of scheduled time; and increased online courses by over 50% of target (Counter Terrorism Operations Support)
- Supported the national security complex and legacy cleanup waste disposal through successful operation of the Radioactive Waste Management Complex and continued to support environmental characterization activities at the NNSS
- Supported DOE/NNSA reviews, assessments, and negotiations with the Nevada Division of Environmental Protection following the discovery of the noncompliant waste shipments

Goal 4
- Received a 2019 R&D 100 Finalist Award for Falcon, first “man” portable, easy to deploy, DPF-based compact neutron source
- Submitted two new technologies, ICARUS and the X-Ray Polarizing Beam Splitter, for 2020 R&D 100 awards; X-Ray Polarizing Beam Splitter won
- Continued more than 20 active collaborations between Site-Directed Research and Development (SDRD), NNSA mission programs, universities, and special partnership projects
- Developed new diagnostic data recovery capabilities adopted by NNSA programs
- Authored fourteen journal publications and four new technology abstracts
- Successfully conducted a virtual SDRD proposal process with over 150 proposals submitted

Goal 5
- Expeditiously established a multi-disciplinary COVID-19 Monitoring Team that collected data, responded to data calls, and provided COVID-19 guidance for the entire NvE User Community
- Restarted DAF Downdraft Table and successfully completed first virtual readiness review activities
- Spearheaded enterprise-wide common building design strategy becoming the NA-50 Standard Acquisition and Recapitalization (STAR) initiative
• First in the complex to integrate Design Basis Threat requirements into Emergency Planning Hazard Assessments; performed extremely well during no-notice Material Control and Accountability performance test
• Created a security authorization basis process for quickly approving security changes
• Completed DAF Argus Project 136 days ahead of schedule and $4.3M under budget
• Achieved many DOE sustainability goals, including Mercury Building #1 Leadership in Energy and Environmental Design (LEED) Gold status for NNSS

Goal 6
• Acted promptly and decisively during the COVID-19 pandemic to protect employee health, while executing all PMEFs, Mission Essential Functions, and other high priority activities and exhibited strong leadership with all NNSS partner organizations
• Received recognition for effective site-wide integration efforts from the NNSA HQ-sponsored Radiological Waste Peer Review Team and during ASD Annual Project Review
• Used parent company reachback for expertise in safety, design engineering, water distribution, asset management, mining and external assessments to improve processes
• Continued to demonstrate strong ownership of the NvE integration role to enhance communications supporting the safe, secure, efficient and effective mission execution through interactions with the NNSA, National Laboratory partners, and Other Government Agency sponsors
• Supported NNSA on Nuclear Security Enterprise Recruitment Strategy and Governance Peer Review

Issues:
Goal 1
• Submitted UCEP Subproject 020 60% design multiple times without incorporating all review comments
• Drop from a critical lift at the Joint Actinide Shock Physics Experimental Research Facility, resulting in work pause, represented a repeat lifting issue

Goal 2
• Experienced significant delay in determining acquisition strategies for mining, difficulty in reliably estimating costs, and under-executed FY20 allocated funding for a highly visible DNN project
• Strained working relationship between Remote Sensing Laboratories at Nellis & Andrews
• Difficulty retaining technical staff for the Counterterrorism and Counterproliferation program

Goal 3
• Continued to have challenges with cost estimates and critical procurements for other agencies

Goal 5
• Finished year behind schedule and over budget on ASD project and both UCEP subprojects
• Continued to experience challenges with Project Management to include planning, estimating, execution, and integration of Subject Matter Experts at all project phases
• Continued to experience quality and timeliness issues with work planning, conduct of operations, safety basis reviews and development, other safety management, & document development

Goal 6
• Continued Management attention needed for UCEP and ASD projects during the first half of FY2020
• Continued proactive support is required from Parent Companies when issues arise
• Closed issues without evidence of justification or demonstrated effectiveness of the actions taken