



NEVADA SITE OFFICE

**FY 2011 Performance
Evaluation Report**

OCTOBER 1, 2010, THROUGH SEPTEMBER 30, 2011

for

CONTRACT NO. DE-AC52-06NA25946

with

NATIONAL SECURITY TECHNOLOGIES, LLC

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11/15/11

(Date)

**FY 2011 PERFORMANCE EVALUATION REPORT (PER)
OCTOBER 1, 2010- THROUGH SEPTEMBER 30, 2011
CONTRACT NUMBER DE-AC52-06NA25946
NATIONAL SECURITY TECHNOLOGIES, LLC**

I. EXECUTIVE SUMMARY

This Award Fee Report includes an assessment of National Security Technologies, LLC's (NSTec) overall performance, responsiveness, senior management involvement, partnerships and teamwork in support of the National Nuclear Security Administration (NNSA) Nevada Site Office (NSO) Strategic Initiatives and site priorities against twelve Performance Based Incentives (PBI) (including Multi-Site performance measures) and twenty three Performance Objectives (POs) identified in the Fiscal Year 2011 (FY 2011) Performance Evaluation Plan (PEP). The PEP was a combination of base, stretch and multi-site performance measures with breakout values as follows.

- Base Fee = 60%
- Stretch Fee = 30%
- Multi-Site Fee = 10%

Fee under this PEP is earned commensurate with performance as measured by the aggregate percentage of success in achieving the base performance targets as a category and then the stretch performance targets as a category. In order to be eligible to earn any of the stretch pool fee at risk, the base performance must be at least 85% or higher in each performance category (Mission, Operations, Management), irrespective of performance against the stretch performance measures.

The overall performance of during this period was deemed "Excellent" For FY 2011, NSTec's performance was excellent in some areas, while other areas still require additional work to satisfy NSO's expectations, especially in areas that have continued to be of concern from previous rating periods. Key achievements included:

- JASPER successfully restarted as a Cat 3 nuclear facility and supported a plutonium shot at the NNSS on September 14, 2011 three months ahead of schedule.
- NSTec successfully supported the Barolo series of subcritical experiments with 100% data return.
- NSTec successfully supported the start of NCER criticality experiments for the international community and the first ignition experiments on the National Ignition Facility (NIF).

- A major, international deployment was made by the NSTec RSL nuclear emergency response teams to the damaged reactor complex in Japan following the disastrous earthquake and tsunami in March 2011.
- Through the achievement of significant acceleration of schedule, NSTec was able to complete the buy-back of additional EM work under the existing Environmental Restoration American Reinvestment and Recovery Act (ARRA) Work Authorization.
- NSTec was able to absorb a multi-million dollar reduction in Environmental Funding without a reduction in force through leveraging worker reassignments to other areas of the company.
- The NSTec senior management team successfully implemented the Formality of Operations Improvement Project (FOIP) in accordance with the associated Project Execution Plan (PEP).
- The NSTec Earned Value Management System was recertified for an additional three years and was commended for effective implementation.
- NSTec passed a stringent 3-year Recertification Audit for ISO 9001
- NSTec continued to successfully implement its Environmental Management System including achieving their ISO 14001 recertification.
- NSTec achieved DOE VPP Superior Star status for the second consecutive year.
- NSTec's Director for ESH&Q was selected as the NNSA Contractor Safety Professional of the Year for calendar year 2010.
- The cohesive efforts of NSTec resulted in the effective handling of seven wild land fires in the summer of FY2011.
- Institutionalization of the Contractor Assurance System (CAS) Dashboard and its associated metrics allow for a wide-range of performance tracking by both NSTec and NSO.
- Through a HQ lead joint self-assessment, the NSO/NSTec LOCAS was deemed ready for the 2nd Quarter FY 12 NNSA HQ Affirmation Review.
- NSTec FY 11 Annual Analysis Report on functional health represented a significant improvement from FY2010.
- NSTec instituted a reorganization which resulted in the merger of all quality assurance and organizational improvement elements.

- NSTec held indirect costs to approximately \$1M below the approved indirect baseline of \$170.4M and was also able to absorb an additional \$2.5M in unplanned work.
- NSTec Chief Operating Officer (COO) supported the overall NNSA mission and One-NNSA initiative through the co-chairmanship of the Administrator’s Business Management Advisory Council (BMAC) and membership on the Deputy Secretary’s COO Working Group.

While NSTec’s overall performance is rated “excellent,” there remain several weaknesses that indicate continued improvement can still be achieved. Additional senior NSTec management focus is needed in the areas of cyber security and system engineering. In addition, NSTec needs to continue to improve and enhance communications both internally and with outside customers.

NOTE: NNSA/NSO’s FY2010 NSTec PER included an outstanding matter. The DOE Office of Enforcement was investigating potential safety issues concerning NSTec’s Device Assembly Facility/Criticality Experiments Facility (DAF/CEF) fire penetration seals at the time of the evaluation. Our report indicated resolution of this matter was expected in FY2011. On August 22, 2011, NNSA issued a Preliminary Notice of Violation (PNOV) to National Security Technologies, LLC (NSTec) for violations of Department of Energy’s (DOE) nuclear safety regulations. The PNOV was issued with a total proposed civil penalty of \$178,750. By letter of September 14, 2011, the DOE Office of Health, Safety & Security (HSS) acknowledged receipt of NSTec’s payment of the penalty and deemed the PNOV as a Final Order with no additional enforcement to be pursued. In addition, NSTec successfully executed the Formality of Operations Improvement Project (see ATI-04) which implemented improvements in nuclear safety and operations at the Nevada National Security Site. This included improvements in work control to enhance the rigor and integrity of quality control hold points.

II. ESSENTIAL PERFORMANCE MEASURES

MEASURE 1.0: MISSION ESSENTIAL – NNSA & EM

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| <h4>1.1 Campaigns/Directed Stock Pile Work – MRT Milestones -- High Hazard Integral Experiments at NNS</h4> |
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Introduction

This measure evaluates NSTec’s performance in supporting the Laboratories’ execution of high-hazard experiments at the NNS. The support provided was excellent and all experiments were executed either ahead of or on schedule and all critical data was captured.

Achievements

There are three major activities under this measure: Subcritical Experiments; Joint Actinide Shock Physics Experimental Research (JASPER); and High Explosive Pulse Power Experiments (HEPPE). A fourth activity, Large Bore Powder Gun was deferred at the direction of NNSA HQ.

Subcritical Experiments: The Barolo series, comprised of Barolo Confirmatory, Bacchus Confirmatory (Ortega), Bacchus, Barolo A, Barolo B and the static Pu Step wedge, was completed ahead of schedule on March 16, 2011 with the execution of the last step-wedge experiment at U1a. Data recovery for all experiments was outstanding and provided additional information to support the Stockpile Stewardship program.

Three Mini-G experiments were successfully executed at BEEF with the last in this series completed on July 17, 2011. Data recovery was outstanding. The Full Function Test was cancelled by HQ's direction.

The Powder Gun was deferred to out-years, the milestone cancelled by NNSA HQ, and a substitute measure, 2.4 was put in its place.

JASPER shots 87, 88, and 89 were successfully executed as part of the Return to Program (RTP) activities in preparation for resumption of hot shots after a restart as a Hazard Category 3 Nuclear Facility. These shots provided confirmation that the facility was fully prepared to execute hot shots and resume providing critical data to the Stockpile Stewardship Program. A hot shot, shot 90, was successfully executed on September 14th with excellent data recovery. The Device Assembly Facility (DAF) Glovebox, which was incorporated into the RTP, obtained approval to restart operations to support JASPER target assembly.

Areas Requiring Improvement

None reported

1.2 Campaigns / Directed Stockpile Work – Other Experimental Activities

Introduction

This measure evaluates NSTec performance in support of various Laboratory-identified activities supporting the Stockpile Stewardship Program. NSTec has completed all identified key deliverables in an exceptional manner meeting all requirements.

Achievements

This measure is comprised of seven sub elements: Radiographic and Neutron Source Development, Z Materials Experiments, Shock Wave Related Diagnostics, High Energy Density Physics Diagnostics, Detectors and Instrumentation Development, Nuclear Event Analysis, and Stockpile Stewardship Data Analysis. Each of these sub elements has one or more key deliverable that supports the overall goals of the Stockpile Stewardship Program. In accomplishing these activities NSTec worked closely with the Laboratory Principal Investigator to ensure requirements were met.

1. Radiographic and Neutron Source Development: All three key deliverables were completed. For the deliverable to reduce Dual Axis Radiographic Hydrodynamic Test Time Resolved Spot Size (DAHRT TRSS) image jitter to less than 2 nS, the original vendor could not meet requirements and NSTec was able to use an alternate method to meet the requirements.

2. Z Materials Experiments: The key deliverable was successfully completed.
3. Shock Wave Related Diagnostics: All six key deliverables were completed. A 32 channel multiplexed Photon Doppler Velocimetry (PDV), required by one of the key deliverables was successfully fielded on two experiments. The ability to multiplex data will significantly reduce experimental costs.
4. High Energy Density Physics Diagnostics: All four key deliverables were completed. With respect to the operation and maintenance of core calibration laboratories, NSTec worked closely with the Lawrence Livermore National Laboratory (LLNL) NIF Calibration Integrated Project Team to ensure the requirements associated with the NIF experimental schedule were met.
5. Detectors and Instrumentation Development: The two key deliverables were successfully completed.
6. Nuclear Event Analysis: All four key deliverables related to past nuclear tests were completed. NSTec also completed an additional neutron experiment (NUEX) event that was not on the schedule.
7. Stockpile Stewardship Data Analysis: All three key deliverables were completed.

Areas Requiring Improvement

None reported

1.3 National Center for Nuclear Security (NCNS)

Introduction

This measure requires the contractor to support NNSA in the development of the NCNS as the center for collaboration of the US government agencies in pursuit of nuclear arms control and nuclear nonproliferation. In FY11, the contractor provided outstanding support and reached all the milestones and deliverables addressed within this PO. In addition, the contractor exceeded expectations in technical products delivered to multiple customers.

Achievements

The NCNS Program executed critical milestones meeting significant technical challenges while also meeting important program milestones.

- Project TAOS milestones were delivered ahead of schedule within budget. TAOS required expedited execution within a tight fiscal budget. NSTec also coordinated strong working relationships between various organizations to support successful execution.
- Project SPE presented significant challenges in which NSTec technical expertise facilitated solutions and highly successful project execution. Project SPE resulted in outstanding data collection for the test scientists which will shape future test activities.

NSTec PER 11-16-11

- Project PELE was executed in a highly successful manner at BEEF in close collaboration with the national laboratories. PELE was executed within budget and on schedule. Work was executed in condensed fashion to both reduce cost and improve data collection efforts. Data recovery from PELE was outstanding.
- The Mazzini project successfully performed its series of investigation April 11-14, 2011 and advanced the science and technology associated with remote detection and characterization of radiological material under various presentations and field conditions.

Areas Requiring Improvement

None Reported

1.4 Environmental Mgmt – FFACO Milestones

Introduction

The objective of this performance measure is to complete Federal Facility Agreement and Consent Order (FFACO) milestones and support activities, ensure compliance with regulatory requirements, and eliminate project risk all within Environmental Management Information Systems (EMIS) cost and schedule thresholds. During this performance year, the contractor exceeded almost all of the significant award fee criteria and has met overall cost, schedule, and technical performance requirements of the contract as defined and measured against the criteria in the award-fee plan for the award fee evaluation period.

Achievements

All FFACO and regulatory milestones were completed on or ahead of schedule and were compliant with all regulatory requirements. The combined Environmental Restoration (ER) schedule performance index (SPI) is 1.04 and the combined ER cost performance index (CPI) is 1.09 meeting the earned value (EV) target measures to earn full fee.

The contractor provided exceptional support and results to the Environmental Restoration Project. All FFACO/regulatory milestones were completed ahead of schedule and were compliant with all regulatory requirements. All major milestones supporting FFACO requirements were completed as scheduled including the demolition of Test Cell C, completion of well ER-EC-15, and providing input for the Pahute Mesa drilling presentation to the Nevada Department of Environmental Protection (NDEP). Work was completed on schedule and under budget (SPI is 1.04 and CPI is 1.09). The cost efficiencies allowed for additional scope to be accelerated.

The contractor coordinated effectively with other ER contractors during drilling activities and by providing support to the characterization contractor for Soils and Industrial Sites activities.

Areas Requiring Improvement

The contractor did not adequately manage EM project risk in the area of safety. In particular, the safety incident during work on the Pluto vault could have injured personnel and did result in cost increases and schedule delays. NSTec identified and completed corrective actions to reduce the potential for similar incidents to occur in the future.

NSTec PER 11-16-11

1.5 American Reinvestment and Recovery Act (ARRA) (Environmental Restoration Milestones)

Introduction

The objective of this performance measure is to complete all ARRA approved work authorization tasks by September 30, 2011 with an SPI > 1.5, while ensuring compliance with environment, safety & health (ES&H) regulatory requirements and HQ ARRA reporting requirements, and while controlling project risk. Additionally, NSTec was required to provide support for the completion of the ARRA activities of the NSO Environmental Service contractor Navarro-Interra (N-I). The contractor significantly exceeded expectations for performance objective by completing the majority of work well ahead of schedule and under budget (lifecycle CPI is currently 1.32). This allowed NNSA/NSO to accelerate additional buyback scope. NSTec provided timely support to N-I ARRA work activities, met all ARRA reporting requirements and controlled project risk.

Achievements

The contractor provided exceptional support and results to the ER ARRA Project. The majority of the contractors planned work for ARRA was completed by December 2010 ahead of schedule and under budget (SPI was 1.11 and the CPI was 1.12). This allowed an additional \$3.1 million of buyback scope to be accelerated into FY 2011. Additional efficiencies were realized through the second half of the year and supplementary buyback scope was accelerated throughout the summer. This allowed NSO to offset some of the budget reductions expected in FY12.

Major accomplishments in the ER ARRA project during FY2011 included completion of well ER-EC-13 construction, submission of the Closure Report (CR) amendment for Reactor Maintenance, Assembly and Disassembly (RMAD) Facility demolition, completion of Pluto demolition and shipment of all resulting waste/fill materials, and submission of the final CR amendment for completion of Pluto demolition all well ahead of scheduled milestones. Additionally all ARRA monthly and quarterly reports were submitted on time.

Areas Requiring Improvement

None reported

1.6 Power Infrastructure

Introduction

The contractor has provided exceptional support in implementation of effective and efficient cost saving initiatives that sustain the mission supporting power infrastructure. The contractor exceeded expectations by responding to changing requirements for reduction of power dispatch operations. Additionally, they exceeded expectations by extending the cost tracking system beyond the 34.5 kV systems to the lower voltage 12.4 kV systems.

NSTec PER 11-16-11

Achievements

The contractor implemented 4/10 operations on October 4, 2010. After completing this target, NSTec responded expeditiously to external customer requirements and further NSO direction to reinstitute 24/7 operations for the power dispatch organization.

NSTec successfully submitted the first, second and third quarter data to NSO via letter correspondence with the fourth quarter report being submitted in October. In addition to implementing a maintenance cost tracking system for the 34.5kV power system, NSTec also initiated work for implementation of this system for the 12.5kV power system in Mercury. NSTec successfully initiated development of the Geographic Information System (GIS) maps and supporting databases in order to help plan work and enhance operations of these systems.

Areas Requiring Improvement

None Reported

1.7 Cyber Security

Introduction

The contractor met some of the award fee criteria in support of the cyber security program. The contractor successfully preserved the confidentiality, integrity, and availability of information and information systems.

Achievements

The contractor successfully ensured the security of classified and unclassified information systems. The contractor recognized that the cyber security program was not meeting technical and programmatic expectations, and changed the management of the program. The contractor took immediate action to develop a preliminary path forward for; security strategy, roles and responsibilities, and risk management.

Areas Requiring Improvement

The contractor did not meet several Annual Operating Plan objectives and 3 sub-elements of Target #1. While the security of the network was maintained the effectiveness and efficiency of the cyber security program deteriorated because of poor cyber security management and leadership. The cyber security program lacks a clear vision, investment strategy, and tactical plan to bring the program back on track.

The contractor needs to evaluate and leverage existing technologies to automate processes currently being done by personnel. For example the use of an automated vulnerability scanner and configuration compliance manager was unused or poorly configured throughout most of the year providing no benefit to the government.

1.8 Security – Classified Footprint Reduction

Introduction

The contractor provided exceptional execution in reducing the site security footprint to include reducing unnecessary facilities and surplus material by over 5%.

NSTec PER 11-16-11

Achievements

The contractor reduced unnecessary facilities and surplus materials (classified parts, documents, vault type rooms (VTRs), etc) to ensure a “cradle to grave” reduction of classified matter. The contractor significantly exceeded expectations for this objective by exceeding the goal of 5%. This was accomplished on schedule and under budget.

Areas Requiring Improvement

None Reported

MEASURE 3.0: IMPROVEMENT AREAS – ESSENTIAL

3.1 Quality Assurance

Introduction

This NSTec performance metric was designed to improve NSTec Quality Assurance (QA) program elements including Quality Control and Safety Software Inventory. The contractor exceeded expectations for this functional area by exceeding the planned work level. Four of five targets were exceeded. Additional accomplishments were noted as well.

Achievements

- **Effectively integration of Quality Control into Type 1 & 2 work package planning:** NSTec reported impressive Quality Inspection Plans (QIP) cycle time achievement, but this accomplishment was tainted by a 53% rejected/rework rate for QIPs associated with Type 1 & 2 Work Packages. This issue has been entered into NSTec’s issues management system, caWEB, to help drive further improvement. While NSTec struggled with rework of QIP, they still met their internal goals. The end result is an improvement in the integration of quality control into Type 1 & 2 work packages. This is evidenced by the absence of missed hold points and demonstration of an aggressive effort to drive further improvement in this area. This target was met and exceeded.
- **Consistent identification and implementation of quality attributes associated with preparation and issuance of Quality Grade (QG) 1 and 2 Purchase Orders (POs):** At the beginning of FY11 a metric was established to track the accuracy and completeness of QG1 & QG2 Pre-Award Purchase Orders (POs) reviewed by QA. A baseline was established and a goal was set of 3 or less Pre-Award POs per month returned to Procurement for correction or clarification. This goal was exceeded every month throughout the fiscal year. This indicates a stable process and that Procurement is effectively flowing quality requirements to all suppliers. This target was met and exceeded.
- **Maintain the NSTec Safety Software Inventory to reflect expectations of DOE G 414.1-4, Safety Software Guide for use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance:** This target presumed an accurate safety software inventory would be available to be “maintained” this year. A final product was

received September 21, 2011 that reflects an accurate inventory which can now be maintained. In addition to assigning inventory numbers for new safety software identified from previous data call efforts, the team ensured all application owners, delegates and responsible organizations are current and listed on the data call inventory. The final software inventory is compliant with DOE G 414.1-4, "Safety Software Guide for use with 10 CFR 830 Subpart A, Quality Assurance Requirements, and DOE O 414.1C, Quality Assurance." This target was met.

- **Finalize implementation of the Quality Pause Initiative:** NSTec has developed and implemented a Quality Pause/Time Out process. The Quality Pause Initiative was merged with the Time Out/ Stop Work process and included a revision to CCD-QA05.001-008, "Time Out/Stop Work." This revision instituted the process for any employee having the ability to call a quality Time Out. This process has been implemented and is working extremely well. This approach has been effectively used since the December 2010 Quality Management System / Contractor Assurance System Executive Leadership Council. This target was met and exceeded.
- **Provide a documented evaluation of the impact of transitioning to NQA-1: 2008 and 2009 addenda for nuclear work:** NSTec provided a documented evaluation of the impact of transitioning to NQA-1: 2008 and 2009 addenda for nuclear work on time. The comprehensive gap analysis compared the differences between NQA-1-2000 and NQA-1-2008 w/ 2009 addenda. It allowed for a determination of the level of effort required to transition from NQA-1-2000 to NQA-1-2008 w/ 2009 addenda in anticipation of the revision to DOE O 414.1C. NSTec recommended they not transition to the updated quality standard. This target was met and exceeded.

In addition to the above targets, the contractor also instituted a "QA Moment" briefing to address procedural adherence in response to an adverse trend identified through their annual CAS analysis. Quad charts were developed to give an enhanced drill-down of the procedure-related issues.

NSTec also passed a stringent 3-year Recertification Audit for ISO 9001 which is firm evidence of NSTec's continued effort in appropriately applying quality activities across their operations.

NSTec QAD has led the complex Quality Supplier Working Group (QSWG) in developing a shared approach to approving suppliers resulting in impressive complex-wide cost savings. This includes 1351 suppliers with a data share ratio of 13%. This effort has resulted in establishing a mechanism to reduce duplication of effort by sharing assessment data for approval of key suppliers across the NSE.

The Welding Manual was revised, consolidated, and streamlined from over a 600 page multi-document manual into a total of 80 pages in one CCD and two supporting CDs.

Areas Requiring Improvement

None Reported

3.2 Nuclear Safety Basis Implementation

Introduction

NSTec met or exceeded the significant award fee criteria and achieved overall schedule and technical performance requirements as defined and measured in accordance with the Nuclear Safety Basis Improvement performance objective. In most cases, the contractor developed and maintained nuclear facility safety basis documents and safety design basis documents in accordance with their quality assurance processes. In most cases, safety basis deliverables were developed efficiently and determined to be fully compliant with 10 CFR 830, Subpart B, and consistent with supporting company directives, DOE directives, and associated regulatory standards.

Achievements

NSTec prepared safety basis documents in accordance with the associated Safety Basis Strategy (SBS) to ensure integration and coordination with NNSA/NSO Program and Nuclear Safety Team staff. In most cases, final safety basis deliverables approved by NSO had no conditions of approval documented in the associated Safety Evaluation Report (SER). Significant accomplishments included: DAF safety basis changes to support nuclear counterterrorism material receipt and operational activities, JASPER safety basis changes supporting the RTP project, DAF Documented Safety Analysis (DSA) update including changes to enable preparation of JASPER targets inside the Gloveboxes, and JASPER safety basis changes that addressed Independent Review Team findings. In addition, NSO concurred with the following SBS documents: Area 3/5 DSA annual update, Nuclear Onsite Transportation Safety Document (OTSD) annual update, and safety basis changes supporting the Gemini subcritical experiment. The SBS process ensures an efficient and effective approach for development, review and approval of the associated safety basis documents.

NSTec demonstrated a graded-approach that resulted in cost-effective safety analysis commensurate with appropriate risk considerations to enable safe and timely completion of mission activities. Representative accomplishments included: JASPER RTP safety basis changes, DAF DSA safety basis changes to support Nuclear Counterterrorism Projects, DAF DSA update with Glovebox changes, High-Efficiency Particulate Air (HEPA) Filtered Ventilation System (HFVS) Justification for Continued Operation (JCO), Area 3/5 DSA changes to support Portsmouth Material, DAF Fire Suppression System JCO, and OTSD changes to support use of Safety Secure Transport (SST).

When appropriate, NSTec submitted documented evidence of adequate QA reviews in the form of Nuclear Safety Review Reports completed by independent, qualified reviewers. Safety basis documents developed during the evaluation required minimal rework to resolve non-compliant conditions, and in general, enabled timely and efficient execution of programmatic activities.

Areas Requiring Improvement

Contrary to CD-NENG.017, some DAF and CEF safety basis changes were not consistent with the agreed upon SBS and in certain limited cases, some changes were implemented prior to obtaining NSO concurrence with the associated SBS.

3.3 Management System

Introduction

NSTec exceeded performance by completing all Management System performance measures ahead of schedule throughout the fiscal year. Quality of work products exceeded expectations and provided NSO with products that demonstrated positive attributes in communication, quality, and contractor assurance performance.

Achievements

NSTec exceeded expectations on all four performance targets. In addition, all were completed ahead of schedule, normally by two months. No rework was required after review by NSO management and staff on the final products.

- **Management System Framework:** NSTec proactively completed this assignment two months ahead of schedule. In Nov. 2010 (letter from Mellington to Cook), NSO declared that “NSTec CAS is sufficiently effective to support NNSA/NSO focus of federal oversight on systems rather than transactions for NSTec non-nuclear activities ...” Completion of this measure was further demonstrated in Sept. 2011 through the joint Line Oversight / Contractor Assurance System (LOCAS) Self Assessment. Results of the LOCAS Self Assessment indicate that NSTec is ready for affirmation. The NSTec Dashboard development was exceptional and demonstrates transparently that metrics are being tracked for functional/mission areas. This tool has allowed NSO staff to successfully perform direct and continuous oversight of its functional/mission areas on an ongoing basis.
- **Implement Framework and Begin Demonstrating Success:** NSTec completed this assignment in March 2011. A total of 315 metrics have been developed and are being tracked. NSTec implemented a methodology within caWeb to support trending and analysis in conjunction with NSO specified functional/mission areas. After negotiations with NSO, this was modified to include incorporation of functional area mapping elements to increase detail for trending and analysis.
- **Improve Corrective Action Plans (CAP):** This assignment was completed in January 2011, two months ahead of schedule. A CAP review checklist and process was developed and followed as part of this performance measure. Results are being tracked and continuous improvement has been demonstrated throughout the fiscal year.
- **Improve Management System Quality:** NSTec completed this performance measure two months ahead of schedule in Dec. 2010. NSTec has established a management assessment system checklist and process used for performance measurement. The feedback received is driving quality improvements exceeding original expectations. Monthly briefings to NSTec senior management include discussions on any issues or trends. This information was used to develop the FY2012 Annual Analysis Report (AAR), a superior product as compared to FY 11. NSTec teamed with NSO to develop an assessment plan and perform the LOCAS joint self assessment during the 4th Q. This was a significant effort and NSTec’s support was vital to the successful completion of the Assessment. All Contractor elements and objectives were met and several noteworthy practices were identified on NSTec management systems.

Overall, NSTec's improvements as a result of exceeding expectations for this performance objective are vital to the NSO and NSTec readiness for LOCAS Affirmation Review to be conducted during the 2nd Quarter of FY 2012. NSTec's management system areas continue to evolve and improve.

Areas Requiring Improvement

None Reported

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| 3.4 Engineering Improvement |
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Introduction

NSTec met or substantially exceeded expectations to improve engineering work scope definition, cost and schedule performance, and implement industry standard engineering methodologies.

Achievements

NSTec has met expectations for updating metrics monthly and posting them on the dashboard.

NSTec engineering has exceeded expectations to produce value added design outputs that meet cost, scope, and schedule requirements. Schedule performance metric data exceeds the established 80% goal with a 90% measure. Cost performance metric data exceeds the established 90% goal with a 98% measure.

NSTec has met expectations to improve customer communications, especially with Project Managers, Federal Project Directors, and program points of contact. A monthly Project Status Review meeting was established. The meeting is attended by representatives from Project Management, Construction, and a representative from Nevada Site Operations. Engineering has implemented a new approach for streamlined work execution called Design Assist to distinguish between a design effort and an engineering effort.

NSTec has met the expectation to establish a customer satisfaction baseline and demonstrate improvement. This was done by establishing regular customer surveys and tracking improvements.

NSTec has exceeded expectations to demonstrate implementation of industry standard engineering methodologies. Design Engineers and Designers participated in several conferences, seminars, and classes in order to remain current on industry practices. The effectiveness assessment for this FY indicated that the use of the Level 1 and Level 2 task designations has been a significant benefit to customers by reducing the scope of the engineering effort to meet the needs of the customer and reducing the engineering cost to the customer.

NSTec has exceeded expectations to establish technical qualification requirements and demonstrate achievement by technical staff. NSTec established core requirements based on benchmarking other DOE sites. Based on the benchmarking efforts a needs analysis and gap analysis were completed. Design and development documents for design engineering core programs (Architectural, Civil, Electrical, Mechanical, Fire Protection, Mining, and Structural disciplines) were completed in April. These

documents included program development plans, qualification card masters, and qualification construction forms for each discipline.

Areas Requiring Improvement

None Reported

3.5 Criticality Safety

Introduction

The contractor is required to implement and maintain a fully compliant DOE O 420.1B Criticality Safety Program at the NNSS. NSTec did not fully meet the performance criteria for this objective.

Achievements

NSTec completed several of the deliverables identified in the Implementation Plan for Identification of Criticality Safety Controls. These included an organizational procedure and guidance document for integration of criticality safety evaluations with safety basis documents. In addition, NSTec completed the Criticality Control Reviews for all Criticality Safety Evaluations needed to support operations at the Device Assembly Facility and Area 5. However, this was not completed until September 30, 2011. As a result, NSTec did not complete the updates to the appropriate Documented Safety Analysis incorporating the results of the Criticality Control Reviews.

NSTec completed the crosswalk which maps the expectations of the Criticality Safety Program (CSP) to the associated NSTec implementing documents. NSTec participated in several meetings with NSO, Los Alamos National Laboratory (LANL), and LLNL to discuss the NNSS CSP and differences with the two laboratory approved programs. NSTec also completed an evaluation of the NNSS CSP against the approved LANL and LLNL criticality safety programs and submitted the evaluation and recommendations to NSO. However, NSTec did not coordinate the results of this evaluation and recommendations with the two laboratories to determine if this would result in better customer utilization of NNSS facilities.

Areas Requiring Improvement

NSTec needs to complete the updates to the appropriate Documented Safety Analysis incorporating the results of the Criticality Control Reviews.

NSTec needs to coordinate the results of the evaluation of the NNSS CSP with the LANL and LLNL CSPs with the two laboratories and propose improvements to the NNSS CSP that will facilitate better customer utilization.

NSO conducted an assessment of the NSTec Criticality Safety Program in the third quarter of FY 2011. The outcome of the assessment concluded that NSTec's Criticality Safety Program implementation of DOE-STD-3007 is unsatisfactory and NSO has concerns with NSTec's ability to produce and internally review Criticality Safety Evaluations to ensure compliance with requirements. NSO required NSTec to develop a corrective action plan and compensatory measures. NSTec needs to implement the compensatory measures and execute the corrective actions.

NSTec PER 11-16-11

MEASURE 4.0: SUSTAINED PERFORMANCE AREAS – ESSENTIAL

4.1 Stockpile Stewardship Experimental Support

Introduction

This measure evaluates the contractor's performance in areas such as Environment, Safety and Health (ES&H) Compliance, Communications, Responsiveness, in support of activities at the Laboratories. Evaluations are submitted by the principal points of contact for the activities. At the end of the performance year, the contractor's satisfaction rating well exceeded the target.

Achievements

This measure called for NSTec to rate greater than 98% as either satisfied or highly satisfied in the evaluations. A total of 935 individual evaluations were received with 931 being either satisfied or highly satisfied. In the few instances when a customer indicated they had not been satisfied, the contractor worked with the Principal Investigators to address the issues identified.

Areas Requiring Improvement

None Reported

4.2 National Emergency Response Program Readiness & Effectiveness

Introduction

The objective of this performance measure is to ensure the ability of the emergency response assets managed at the Remote Sensing Laboratory (RSL) to deploy effectively to radiological emergencies. It is important to the Nation that the proper equipment is in place and can be deployed quickly and that the personnel, both technical and administrative, are knowledgeable, effective, and can deploy within the stated timelines. The contractor performed at an exceptionally high level this year including an usually high level of support to the international deployment to Japan following the disastrous earthquake and tsunami.

Achievements

This year was unusual in that a major, international deployment occurred that provided a real-time test to the abilities of the RSL emergency responders and equipment. The response to the damaged reactor complex in Japan following the disastrous earthquake and tsunami in March 2011 showed that the team could respond within the required timeline, and, most importantly, the team could react well to unexpected emergency situations. They dealt in an exemplary fashion to the uncertainty and hysteria they found on arrival in Japan. The data the RSL team generated were crucial to the decisions being made in Japan and by the White House in Washington D.C. The sterling success of the team was recognized by having a positive story done by the CBS program "60 Minutes." The outside recognition of these programs is also indicated by stories and interviews done by CNN and PBS Television.

The annual aviation audit performed in December 2010 had no findings, observations, or opportunities for improvement. The Director of the DOE Office of Aviation Management stated that the RSL aviation program was the “Gold Standard” for all of the other DOE aviation programs.

The RSL provides the central technical group used by NA-46 and NA-40 in their international outreach programs. Scientists from RSL routinely travel the world as recognized authorities on emergency response to radiological disasters.

Areas Requiring Improvement

None Reported

4.3 Weapons of Mass Destruction

Introduction

This measure required the contractor to execute the Counter Terrorism Operations Support (CTOS) Program within authorized scope and budget. The contractor provided outstanding support and reached all the milestones and deliverables addressed within this PO. The contractor significantly exceeded all expectations in this area.

Achievements

NSTec exceeded the expectations in the number of courses taught, number of students trained and units of work. All work performed was within budget.

Areas Requiring Improvement

None Reported

4.4 Nonproliferation Test & Evaluation

Introduction

The contractor provided excellent support and results to the Nonproliferation Test & Evaluation (NTE) Program. They met and exceeded many expectations in the criteria areas.

Achievements

The Nonproliferation Test and Evaluation Complex (NPTEC) met all requirements for facility operations, customer expectations and deliverables, executing the NA-22 projects as specified under approved FY-11 life cycles and within available funding.

During the year several experimental series were successfully executed at NPTEC among them were MAZZINI, and Willow. MAZZINI, a follow on to a prior experiment, was an experiment to demonstrate new remote sensing technology and required the collaboration of several organizations and national laboratories. Due to its complexity, this experiment required many months of preparation. The experiment was executed on schedule under budget. The execution of Willow, another multi-organizational test, resulted in state of the art chemical detection system improvements which will also benefit the nonproliferation community. Due to the continuous process improvement ongoing at NPTEC, it is now considered a “state of the art” complex for the nonproliferation community.

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NSTec personnel were also instrumental in the integration of both external customer coordination and internal facilitation of Special Technologies Laboratory (STL) and RSL deliverables to support critical testing requirements. NSTec coordinated in a high effective manner to ensure that the STL and RSL support was flawlessly incorporated into the experiment execution while meeting schedule and budgetary requirements.

Areas Requiring Improvement

None Reported

4.5 Special Technologies Laboratory (STL)

Introduction

This measure required the contractor to provide support to the DOE Office of Intelligence and Counterintelligence, Applied Technologies Program. The contractor provided outstanding support and reached all the milestones and deliverables addressed within this performance measure. The contractor also exceeded expectations in technical products delivered to multiple customers.

Achievements

NSTec's STL management demonstrated proactive, intelligent leadership this year by building strategically focused partnerships with other government agencies that resulted in expanded capacity while also complimenting the strengths of the laboratory, primarily in the area of cyber-related technologies. The success was evidenced by the fact that STL achieved a record year in newly funded interagency work which exceeded FY10 by more than 20%. This was accomplished in a year of widespread cuts across government programs.

While increased funding truly recognizes the quality of work performed and sustained by STL, multiple customers have documented the technical quality, timeliness, and cost effectiveness of the work performed during FY 11. Products delivered have exceeded customer expectations resulting in both cost savings and delivery of the products.

Areas Requiring Improvement

None Reported

4.6 Safety & Health

Introduction

In FY 2011, contractor exceeded many of the significant criteria and has met overall safety and health performance requirements of the contract. Overall, throughout FY 2011, the contractor successfully maintained a safe and health work environment through sound operations performed in an efficient and effective manner in support of mission objectives.

Achievements

In FY 2011, NSTec experienced a slight increase in the Total Recordable Case (TRC) Rate and a slight decrease in the Days Away from Work, Restriction or Transfer (DART) Case Rate, when compared to the NSTec PER 11-16-11

previous Fiscal Year. At the end of FY 2011, NSTec average TRC was 1.84, which is approximately 20 % higher than the FY 2010 average (1.53). At the end of FY 2011, NSTec average DART was 0.56 which is approximately 3% lower than the FY 2010 average (0.58). Both rates however, are well below comparable industry rates, based on similar North American Industry Classification System (NAICS) Code and continue to meet DOE VPP participation criteria. Both rates also continue to reflect a downward trend since 2006.

Radiological control significantly contributed to the success of multiple mission activities at the NNSS (ie. JASPER CEF, Barolo, etc.). In addition, Radiological Control was able to maintain this excellent support to the mission and the full scale emergency exercise while also providing multiple Radiation Control personnel to the Japan deployment.

NSTec Industrial Hygiene (IH) provided excellent support following the identification of beryllium in buildings 6-911 and 6-914. The facilities were remediated, verified clean, and returned to full operations without any personnel exposures. In addition, NSTec IH worked with the Joint Nevada Program Office to develop a plan to address potential beryllium contamination associated with the TA-18 materials.

NSTec continued to maintain an effective Worker Safety and health Program. They achieved VPP Superior Star status for the second consecutive year. NSTec IH completed all of the scheduled Health Hazard Evaluations for all risk categories during the year. Occupational Safety contributed significantly to the success of multiple mission activities.

In early 2011, NSO identified an issue with the implementation of Integrated Safety Management at an Environmental Management (EM) project. NSTec worked closely with EM to investigate the issue and develop and implement corrective actions. As part of the corrective actions, NSTec aggressively worked to improve communications within the safety and health organization and across all organizations.

Areas Requiring Improvement

NSTec needs to continue to improve and enhance communications between the Safety and Health organization and the other contractor organizations and customers.

4.7 Environmental Protection (R)

Introduction

The contractor exceeded the expectations for performance of an effective Environmental Management System (EMS) program that results in sustainable, environmentally responsible operations, to ensure compliance and advance environmental protection and performance while meeting mission goals.

Achievements

NSTec effectively completed recertification of their ISO 14001 environmental management system. The triennial recertification of NSTec's ISO 14001 Program was granted, effective June 21, 2011.

The contractor maintained an effective EMS that includes site-specific objectives and measurable targets that contribute to the achievement of DOE Sustainable Environmental Stewardship goals established for the NNSS.

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NSTec continued to demonstrate transparency and continuous improvement through its EMS meetings, metrics, and interactions with the DOE environmental management staff. Noted improvements were achieved in the tracking and quality of permit deliverables.

Areas Requiring Improvement

Several minor issues occurred during the performance period which indicated that EMS integration could be further improved.

4.8 Emergency Management

Introduction

The contractor provided top-quality support with professional and timely results in the area of Emergency Management. They substantially exceeded expectations for all performance objectives on or ahead of schedule.

Achievements

All 11 of the Emergency Management Performance Objectives were completed successfully in accordance with established due dates. Highlights of accomplishments for FY2011 include:

- **Continuing Improvement** - NSTec planned conducted and evaluated the Criticality Experiments Facility (CEF) functional-level exercise which validated corrective actions for an Operational Readiness Review (ORR) Pre-start Finding. NSTec successfully supported facility-level exercises as part of the ORRs for both the Barolo Experiment at U1a and the JASPER Restart.
- **Demonstrating Proactive Leadership** – All drills and exercises reflected proactive leadership on behalf of NSTec. Extensive offsite interfaces were established for all aspects of emergency management response.

NSTec planned and conducted workshops and drills integrating NSO Emergency Response Organization (ERO) with offsite agency EROs. Sidewinder 11 involved 16 local, state and federal agencies with an estimated 400 participants. ESOS staff members were selected by industry peers to chair four of nine subcommittees and working groups during the DOE Emergency Management Conference. In addition, an ESOS employee being selected as the DOE complex "Emergency Management Professional of the Year" and NSTec was recognized for most outstanding presentation and Best Informational Display by the Emergency Management industry.

- **Continuity of Operations Program (COOP)** – NSTec developed Consolidated COOP and Pandemic Plans, a COOP awareness campaign, and conducted an exercise for COOP responders. Noteworthy accomplishments included: planning and conducting a COOP Workshop in Albuquerque and leading a COOP workshop during the annual DOE Emergency Management Conference. A NSTec staff member served as the chairperson for the DOE Emergency Management Issues Special Interest Group (EMI SIG) COOP Working Group.

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- **Actual Emergencies** - NSTec coordinated responses to emergency requests through delivery of assets to Clark and Nye County during flooding and provided support to mitigate flash flooding in Pahrump, Nevada. During wild land fire season, two operational emergencies (OEs) were declared and NSTec responded by assisting the Bureau of Land Management. As a result of this assistance, high value communication assets were safeguarded. NSTec was able to successfully mitigate another non-operational emergency using only NNSS assets with no injuries, asset losses or impact to operations. Performance during these emergencies validated the emergency management program (i.e. the facilities, equipment, processes, and training).
- **Qualification Program/Training** - The qualification training programs for fire dispatchers, operations support specialists and the air/ground operations support positions were formalized. This resulted in the creation of 14 new Operations Coordination Center (OCC) courses. In addition, NSTec successfully implemented the Initial Response Guide (IRG), a tool for emergency responders. This innovative and precedence-setting approach received significant interest from other DOE sites. Training was given to all employees covering Standard DOE Order and Guide-driven protective action responses focusing on: impact from the release of hazardous materials and workplace violence events. All emergency management performance objectives/targets completed on or ahead of schedule and substantially exceeded expectations.

Areas Requiring Improvement

None Reported

4.9 Facilities and Infrastructure (F&I)

Introduction

The intent of the F&I measure set was to improve NSTec’s management of deferred maintenance (DM), improve medium range maintenance planning, formalize the Reliability Centered Maintenance (RCM) program, expand the use of the electronic Real Estate/Operations Permit (REOP) database and to manage work management metrics to within acceptable ranges. NSTec met or exceeded all metrics in this performance measure with excellent performance.

Achievements

NSTec achieve a DM buy down of \$26,533,243 in FY11 by being diligent in accounting for DM removed due to demolition, routine maintenance, and corrective maintenance. This buy down demonstrates that NSTec’s approach to maintenance accounting is functioning by allowing the legitimate buy down of DM using existing funding in the absence of funding targeted at DM buy down.

NSTec completed five-year maintenance plans for all of the 124 facilities required in FY 11. The plans are published in the Facility Data Warehouse and prioritize facilities into various sustainment levels. Timely completion of this task was critical in setting the stage for meeting FY 12 sustainability goals.

NSTec exceeded the goal of updating 37 REOP to the e-REOP process by completing an additional 7 e-REOPs in FY 11.

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NSTec managed FY11 maintenance backlog at 5.11 weeks which is within the goal range of 4 to 6 weeks.

Of particular note was NSTec achievement of maintaining a high Preventive Maintenance (PM) completion rate of 99.05% in Mission Critical (MC) and 98.84% in Mission Dependent, Not Critical (MDNC) facilities, thereby exceeding the goals of 98% for MC and 95% for MDNC. NSTec was able to keep the completion rates high during the historically difficult periods of December and the summer months.

NSTec successfully realigned their efforts in the RCM to focus on the formalization of the program. NSTec met all handshake agreement deliverables. NSTec's published RCM program documents are CD-G024.001, GDE-G024.002, and PD-G024.002. In addition, NSTec added a qualification for RCM positions and established record retention requirements and reporting criteria.

Areas Requiring Improvement

None reported

4.10 Project Management

Introduction

NSTec's overall summary performance at the direct program level was within the cost and schedule performance thresholds. The contractor uses a tailoring of its Certified Earn Value Management System (EVMS) on all activities and projects. This disciplined approach resulted in measuring performance for several projects that could be communicated consistently to various levels of NSTec management and NSO.

Achievements

A surveillance by the Office of Acquisition and Project Management (NA-APM) demonstrated that NSTec successfully continues compliance of its Earned Value Management System (EVMS) in accordance with the American National Standards Institute/Electronics Industrial Alliance-748 (ANSI/EIA-748) Standard.

Having a Certified EVMS system enables the contractor to measure performance and provide reliable documentation to the customer through their Dashboard and Project Controls Reporting System. Both these tools provide transparency into contractor data for the customer to measure and evaluate project performance.

In addition:

- (1) NSTec project execution met approved baselines as was demonstrated on their project performance roll up of their directorates each month. Environmental Management continues to perform exceptionally as demonstrated on their monthly cost and schedule performance reports. NSTec did an excellent job for large projects of integrating the scope of all the organizations into one baseline to measure the projects overall cost and schedule performance. This approach

resulted in the ability to evaluate and understand performance indicators for several projects and execute recovery plans as was successfully demonstrated for the Taos, Gemini and Jasper projects.

- (2) NSTec met expectations by integrating safety when executing projects that resulted in no systematic safety issues.
- (3) NSTec did a very good job of planning projects and reporting status in accordance to their Project Management Manual, CD-V000.001 which is based on the requirements of ANSI-748, EVMS.
- (4) NSTec provided project performance on the dashboard. Monthly construction meetings were held between NSO and the NSTec to discuss the project performance status. NSTec did an excellent job of providing NSO with project status via PCRS as well as provides notification for project meetings and field visits.

Areas Requiring Improvement

Project Management integration between various organizations for small projects has a potential impact on cost and schedule performance metrics.

Poor coordination between NSTec construction, procurement, engineering and operations resulted in the incorrect parts being ordered for the 10 foot section of waterline that was constructed inside the pump house. The correct parts had to be ordered and the pipe reconstructed. This was an impact to the project's cost and schedule metrics.

4.11 Security Operations

Introduction

NSTec exceeded most of the significant award fee criteria. In addition, they met overall cost, schedule, and technical performance requirements of the contract. The NSTec security program continues to mature in a very positive manner.

Achievements

The contractor maintained an effective and efficient Safeguards and Security Program, managing and operating functions to support successful mission accomplishment. The contractor exceeded expectations for this project including specific objectives and metrics in Material Control and Accountability, Classification Support, Information Security protection and Incident Management. This was accomplished on schedule, under budget and through the integration with the NSO Security Support Service Contractor.

Areas Requiring Improvement

None Reported

4.12 LL/MLL Waste Receipt Capability

Introduction

The contractor significantly exceeded expectations to maintain capability to receive low-level and mixed low-level waste at the Area 5 Radioactive Waste Management Site. This effort resulted in 1.77 million cubic feet of waste being disposed. In addition, the contractor completed the 92 acre closure cap prior to the regulatory due date; and the contractor optimized workforce and operations due to an FY11 midyear budget reduction. These reductions were performed in a manner that economized operational funding needs while continuing to achieve waste receipt mission.

Achievements

- NSTec maintained capability to receive an annual total of 2 million cubic feet of waste. To accommodate the needs of the DOE generators, the contractor accepted and receiving over 167,000 cubic feet of waste in three out of the twelve months during the fiscal year. Even though the contractor maintained the annual capability to receive 2 million cubic feet of waste, a total of 1.77 million cubic feet of waste was successfully received, accepted, and disposed.
- NSTec completed the construction of the 92 acre closure cap ahead of schedule and within budget.
- NSTec assured the ability to receive mixed waste through the both the new disposal unit and the new storage unit.
- NSTec supported NSO and NA-122 in achieving an approval for weapons components direct disposal in the Radioactive Waste Management Site. This approval will provide a potentially significant cost savings for weapons component disposition throughout the NNSA complex.

Areas Requiring Improvement

None Reported

4.13 Counterintelligence

Introduction

The contractor provided outstanding support and results to the Counterintelligence Directorate (CID). They have substantially exceeded expectations in several critical areas and ensured that CID requirements were achieved. Program deliverables have significantly exceeded expectations for budget and schedule.

Achievements

The contractor supports all DOE/NNSA interests in Nevada under the DOE Counterintelligence (CI), Las Vegas Field Office (LVFO). This performance measure requires the contractor to “Detect, deter, and mitigate foreign intelligence collections and espionage efforts and international terrorist threats against NNSA personnel, classified and other sensitive programs, and information architecture”, and they have exceeded expectations.

LVFO accomplished all Cyber requirements, and provided exceptional support to the Investigations and the Threat Assessments & Analysis Offices. The SCIO and staff open and oversee investigative-related activities and document this activity appropriately. Responses to headquarters requests are substantive and

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timely. A substantial number of analytical products were produced while functioning under a non-optimal Information Technology environment.

During this period of performance, the contractor:

- Provided daily CI oversight to all related entities associated with the NNSA/NSO, NNSS, and the Office of Civilian Radioactive Waste Management.
- Provided travel briefings and debriefings, Foreign Visit and Assignment Host Briefings and Debriefings, CI Awareness Briefings, and New Hire Orientation Briefings.
 - Provided 42 New Hire Orientation Briefings to 340 individuals.
 - Provided 53 CI/Cyber/Counterterrorism threat briefings to 156 individuals.
 - Provided 19 threat briefings to 730 emergency responders.
 - Provided 615 briefings and 232 debriefings of DOE/NNSA Nevada individuals traveling outside the country or hosting foreign nationals.
- Conducted monthly joint briefings with the Nevada Intelligence Center for the NNSA/NSO Executive Staff during their Executive Intelligence Briefings.
- Researched, collaborated and created an Intelligence scenario for a multi-agency exercise.

Areas Requiring Improvement

None Reported

4.14 Business Operations

Introduction

The contractor was evaluated in the areas of budget formulation & execution, business management, financial management, human capital management, legal management, property management, public affairs, records management, supply chain management, and training. The contractor's overall performance in Business Operations exceeded almost all of the significant award fee criteria for the performance period.

Achievements

- **Budget Formulation & Execution:** Overall NSTec exceeded expectations in this functional area. In addition to performing expected activities, NSTec also took several proactive steps resulting in improvements to include:
 - During this year NSTec refined their out-year rate planning forecasting process. This enabled NSTec to more accurately reflect funding requirements and helped proactively mitigate current and future year shortfalls or surpluses in funding.
 - Through oversight of the projected spend for the fiscal year, NSTec was able to use a potential over-recovery to pay the calendar year 2011 pension true-up payment early. This action allowed NSTec to reduce fringe liability by \$255,000 and bring the FY2012 fringe rated down from 63% to 56%.

- **Business Management:**

The contractor has improved their directive impact analysis process which has resulted in a significant reduction to the time it takes to get contract updates accomplished. This process made it possible for us to make 146 directive changes to the contract during FY2011.

During this year, NSTec upgraded its system for processing Work-for-Others (WFO) packages to an electronic system. This new system will improve efficiency of the process and minimize errors since the data is input only once, automatically populating forms. The system will also allow progress tracking throughout the process.

NSTec implemented a Leadership Development Program. This 18-month-long program is designed to develop future leaders in the company through structured learning courses, group training, stretch or special assignments, mentoring, and special group projects.

- **Financial Management:** NSTec continued to perform at a high level against the financial performance measures monitored and evaluated by the NNSA Chief Financial Officer's (CFO) organization. In addition, NSTec also instituted improvements in a number of areas. They instituted an improved communication process with NSO and the NNSA CFO to assure funding concerns and questions are addressed in a timely manner. The NSTec Financial CAS was improved by increasing relevant data in the database as well as redesigning the layout to be more efficient and transparent. The process NSTec uses to report for Active Facilities and Non-EM Environmental Liabilities was also improved.
- **Human Capital Management:** NSTec consistently met and exceeded almost their Human Resources Metrics. In 10 of 12 months, NSTec met 100% of their goals.
- **Legal Management:** NSTec Office of General Counsel has exceeded expectations in the conduct of its Legal Management functions throughout the year, ensuring exceptional coordination on multiple legal issues, prompt and comprehensive communication of litigation matters and strategies, including requests for settlement authority when appropriate, timely provision of litigation reports, and highly effective resolution of two significant cases in litigation over the year.
- **Property Management:** NSTec's performance in Property Management continued at an exceedingly high level for FY11. Property Management met or exceeded the FY 2011 Objective Matrix goals. Support to the Protective Force contractor continued at a high level and process improvements implemented in FY11 significantly improved the inventory time during this FY. Performance in the excess property arena was excellent in that the processing of excess property off the contract is increasing and an initiative has been undertaken to continue this effort over the next couple of years.

Another key achievement for this FY was the actions undertaken to provide essential property to support the Japanese earthquake/tsunami recovery. Loan agreements were completed in a timely manner to support NSTec's significant efforts in Japan.

- **Public Affairs:** NSTec provided a strong and viable tour program that met all the needs of internal and external customers. NSTec was responsive to NSTec specific media calls and supported the NSO/PA during the year in response to media calls. NSTec maintained a very strong and viable Joint Information System PA program. A full cadre was maintained and no findings were levied against the program during several exercises. NSTec/also supported several congressional/intergovernmental involvements during that year. As a whole, NSTec is a very strong member of the community and provides a large number of company employees, as well as corporate dollars, in support of charitable/community organizations.
- **Records Management:** In addition to meeting or exceeding the expectations for the performance period, the NSTec Records Management organization was recognized as having Noteworthy Practices during the ISO recertification review and during the NSO assessment. Letters and Certificates of Appreciation were received recognizing their outstanding support of the Energy Employees Occupational Illness Compensation Program Act (EEOICPA) Program. Other outstanding activities included: the review of operations that resulted in the identification of cost savings; completion of the annual Vital Records inventory ahead of schedule; the use of summer interns to index over 16K of legacy drawings; completion of an external review of the Safety Management Program (SMP) for Procedures, Documents, and Recordkeeping (PDR) to evaluate requirement flow-down adequacy, performance objectives and metrics, and field assessment activities; and commencement of the FY 2012 company-wide records inventory ahead of schedule.
- **Supply Chain Management:** The Contractor demonstrated excellent performance in its efforts to ensure an effective and compliant procurement process that contains all elements necessary to meet applicable federal laws, regulations, policies, and procedures in a timely manner to support customer deliverables and strategic objectives.

The Contractor demonstrated excellent performance through its continued support of all of the Supply Chain Management Center (SCMC) functions. The Contractor significantly exceeded or exceeded all five of the Fiscal Year End (FYE) 2011 Performance Metric Goals that had been established by the NNSA's SCMC. The Contractor continued to demonstrate the use of an effective monthly Self-Assessment process that was first instituted during FY 2010. As a result of this self-assessment process, NSTec's Purchase Order file compliance average for FY 2011 exceeded the Annual Goal of 98%.

The Contractor met all of its Small Business (SB) Socio-Economic Goals for FY 2011 with one minor exception. NSTec achieved a SB Actual Year-To-Date (YTD) Percentage of 1.98% in the Service Disabled Veteran Owned Small Businesses (SDVOSB) Category against the Goal of 2.00%. Performance in this SB category has historically been difficult across the complex.

- **Training:** NSTec has aggressively worked to improve their qualification rates and regular input from the NSTec Training organization has prompted line management to update assigned qualification requirements and get personnel trained and qualified in a timely manner. Feedback from the line about the timing of new training requirements continues to be an issue (new training requirements having no grace period and personnel becoming immediately delinquent). NSTec

has greatly improved the training no-show rate through regular reporting and more management attention.

Areas Requiring Improvement

None Reported

MEASURE 5.0: MULTI-YEAR STRATEGIC OBJECTIVES – ESSENTIAL

5.1 Infrastructure Improvements / Institutional General Plant Project

Introduction

The contractor provided outstanding support for the planning and design of an Institutional General Plant Project (IGPP) project to replace 1.7 miles of the 138kV power transmission line at Hill 200. In turn, this project will stabilize deferred maintenance growth and address infrastructure deficiencies that would negatively impact the accomplishment of future mission work.

Achievements

The contractor exceeded all award fee criteria and met the overall cost, schedule and performance requirements. NSTec completed the Maintenance and Repair (M&R) projects to replace the 23-523 Energy Management System and the A-5 Generator Replacement. NSTec started the planning for the Mercury Sewer Repairs and the A-1 UPS Replacement.

The contractor exceeded the stated performance for the IGPP project. The design work scope was completed on schedule and below budget. M&R projects were completed in FY11, as planned, and FY12 projects are being developed.

Areas Requiring Improvement

None Reported

5.2 General Management

The General Management (GM) objective is global in nature and considers activities important to NSO that require NSTec senior management to work collaboratively, both internal and externally to the organization, in order to achieve the desired results. The performance objectives for this measure include “demonstrated ability to operate as an integrated organization that makes effective use of resources, demonstrated through key metrics, to achieve cost, scope, and schedule efficiencies across all organizational elements while successfully accomplishing NSO mission and operational requirements without compromising quality, safety, and security.” The intent of this measure is to clearly demonstrate how NSTec senior management worked together, during the rating period, to achieve these objectives within a strategic framework of enhancing the long-term viability of the Nevada National Security Site (NNSS) to expand its mission base to a true national security asset for the nation.

The overall performance of NSTec's senior management during this period was deemed "excellent." For Fiscal Year (FY) 2011, NSTec's GM performance was excellent in some areas, while other areas still require additional work to satisfy NSO's expectations, especially in areas that have continued to be of concern from previous rating periods.

Key highlights for this year include:

- After replacement of the Secondary Confinement Chamber and transitioning from a below hazard category 3 nuclear facility to a hazard category 3 nuclear facility, JASPER successfully supported a plutonium shot on September 14, 2011 three months ahead of schedule. A key element was the application of lessons learned from the Bacchus/Barolo and National Criticality Experiment Research Center start-up activities. Establishment of a structured process to ensure the personnel and facility are ready to conduct operations was found to be one of the key elements in preparing for a Contractor Operational Readiness Review and a DOE Operational Readiness Review (ORR). This successful model was followed by JASPER start-up personnel and resulted in only one pre-start finding from the ORR. Contributing to the overall success of the JASPER Return to Program was a highly efficient and effective approach to project management.
- A major, international deployment was made by the RSL nuclear emergency response teams to the damaged reactor complex in Japan following the disastrous earthquake and tsunami in March 2012. The organization and management of this deployment were major undertakings, and they were commendably done. The results of this mission achieved accolades by the press, the White House, and the U.S. authorities in Japan. This reflected well on both DOE and the Nevada Site Office. Following the mission, a major management effort was required to fund the remainder of the fiscal year emergency response programs in that no additional funds were provided to replace the \$7.4M spent on the Japan mission. This was well done, and the personnel and programs were funded adequately into the FY12 funding stream.
- American Reinvestment and Recovery Act (ARRA): Performance for ARRA scope for environmental restoration continued to excel as it neared completion. Using efficiencies, the contractor was able to complete scope under their baseline budget allowing for more buy-back scope to be added in. With both ARRA investment and contractor positive performance, significant acceleration of schedule for both industrial sites facility demolitions, soils sites characterizations and closures, and groundwater drilling campaign preparations were achieved.
- The NSTec senior management team successfully led the Formality of Operations Improvement Project (FOIP) in accordance with the associated Project Execution Plan (PEP). The FOIP PEP defined an integrated strategy that required close alignment and cooperation throughout the entire organization to ensure common objectives were accomplished within authorized funding limits and schedule constraints. Throughout FY 2011, the leadership team championed key improvement actions, closed identified performance gaps and drove optimization of existing processes to effectively support achievement of NNSS mission goals. The Nuclear Operations Directorate was reorganized to provide the required support and allocation of resources necessary to achieve and sustain high levels of nuclear and industrial safety performance.

- **Earned Value Management System (EVMS) Recertification:** The EVMS is an area of notable performance in FY2011. The EVMS is utilized in all facets of project management and serves to demonstrate a culture of financial stewardship by NSTec. As a result of an assessment by HQ, the program was recertified for an additional three years and was commended for effective implementation.
- NSTec passed a stringent 3-year Recertification Audit for ISO 9001 which is firm evidence of NSTec's continued effort in appropriately applying quality activities across their operations.
- **Environmental Management System:** The contractor continued to successfully implement its Environmental Management System including maintaining their ISO 14001 certification. In 2011 the external third party quality assessment organization completed the review of the EMS program approving NSTec for continued ISO 14011 certification. This assessment validated that EMS performance objectives and targets are being adequately integrated across the company into all elements of operational performance.
- NSTec achieved DOE VPP Superior Star status for the second consecutive year. This award was received for achieving injury rates of at least 50% lower than the comparable industry average and by demonstrating strong involvement in the Voluntary Protection Program Participants Association, VPP mentoring, outreach activities, and supporting DOE VPP onsite reviews. NSTec has also actively supported the USDOL – OSHA VPP Special Government Employee certification program.
- NSTec's Director for ESH&Q was selected as the NNSA Contractor Safety Professional of the Year for calendar 2010 in recognition of his outstanding leadership, innovation and professional expertise in orchestrating a value-added integrated approach to implementation of the NSTec's ESH&Q program.
- **Wild Fire Mgmt:** The cohesive efforts of NSTec resulted in the effective handling of seven wild land fires in the summer of 2011. The proactive approach of qualifying pilots in "Bambi Bucket" operations allowed for enhanced responsiveness to a series of fires. External resource support was minimized and costs were lowered due to early fire containment.
- **CAS – Dashboard Improvements:** Institutionalization of the Dashboard and its associated metrics at the working level is seen as a significant achievement for FY 11. The metrics are comprehensive and allow for a wide-range of performance tracking by both NSTec and NSO. In addition to the development of 300+ metrics, the NSTec focus on increasing utilization of the Dashboard has been effective across the organization. It is noted that senior staff and ELC meetings consistently use Dashboard data for evaluating performance.
- **LOCAS Self Assessment:** The NSO/NSTec Joint LOCAS Self Assessment conducted in September, 2011 is evidence of strong NSTec performance in FY 11. The integrated self assessment team, led by NNSA HQ, evaluated federal and contractor implementation of NAP-21 Guidance. The review of areas such as performance measures, CAS training, etc. resulted in a

conclusion that NAP-21 expectations were fully met for all six CAS elements. Given the totality of the positive results for both CAS and LO, the assessment team determined that NSO/NSTec LOCAS is ready for the 2nd Quarter FY 12 NNSA HQ Affirmation Review.

In conjunction with the LOCAS success, the focus by the NSTec Senior Management on fostering a culture of transparency resulted in improved NSTec/NSO interactions. This was accomplished through; Dashboard data reviews, Partnership meetings, Assistant Manager One-on-One meetings and NNSA/NSO participation in ELC meetings.

- Annual Analysis Report impact: The FY 11 Annual Analysis Report on functional health represented a significant improvement from the FY 10 Annual Analysis Report. The NSTec alignment with the NNSA/NSO twenty-four functional areas resulted in increased utilization of the report. The input represented a self-critical analysis which helped both NNSA/NSO and NSTec develop recommendations regarding areas for improvement.
- Organizational changes: The FY 11 reorganization which resulted in the merger of all quality assurance and organizational improvement elements serves as an indicator that NSTec continually strives to improve organizational efficiencies. The ability of the ESH&Q Directorate to focus solely on oversight and improvement initiatives will assist in ensuring timely resolution of issues and will foster a proactive approach to identification of areas for organizational streamlining and process improvements. Likewise, organizational changes in-the Nuclear Operations Directorate resulted in a management and organizational structure that is fully staffed with personnel knowledgeable, capable, and accountable for developing, implementing, and sustaining efficient and compliant nuclear safety and operations programs to enable current and future NNSA missions.
- Environmental Management (EM) Funding issues: As a result of a HQ directed budget reduction due to reduced Congressional funding, EM programs had to absorb a multi-million dollar reduction in funding. NSTec showed both innovation and partnership with the NNSA/NSO in developing, integrating and implementing budget reduction solutions. Of note, NSTec was able to reduce staffing without a reduction in force through leveraging worker reassignments to other areas of the company.
- Indirect Cost Management: NSTec held indirect costs to approximately \$1M below the approved indirect baseline of \$170.4M and was also able to absorb an additional \$2.5M in unplanned work.
- NNSA-Level Support: NSTec Chief Operating Officer (COO) supported the overall NNSA mission and One-NNSA initiative through the co-chairmanship of the Administrator's BMAC and membership on the Deputy Secretary's COO Working Group.

While performance against this measure is rated "excellent," there remain several weaknesses that indicate continued improvement in the area of general management can still be achieved.

- **Cyber Security:** NSTec Cyber Security continues to be a deficiently managed program that requires management attention and action. Cyber Security failed to meet several AOP objectives, the Risk Management Framework was not completed, and even though LANL came to assist NSTec with a SAV, NSTec Management did not implement the corrective actions recommended for the program. In the beginning of FY11, HSS-60, Cyber Security Evaluations, conducted a SAV on NSTec Cyber Security that identified many of the same issues that were identified almost a year later by LANL. The cyber security program lacks fundamental processes, procedures, and policies to ensure effective and efficient management.
- **System Engineering:** In FY 11, assessments were not consistently scheduled and/or performed to ensure defensible performance in all functional areas. This was evident in the area of Systems Engineering where NSTec cognizant system engineers failed to perform required periodic reviews of safety system operability, reliability, and material condition. It was necessary for the NSO to allocate resources to assist in conducting necessary assessments. Federal assessments revealed issues related to the training of cognizant systems engineers, staff turn-over, and lack of configuration management in nuclear facilities. As a follow-on impact, identification of issues by Federal staff resulted in significant time spent by the NSO Issues Screening Team. A focused approach to ensure assessments are scheduled to address all functional areas will mitigate the chance of this reoccurring in the future.
- **EM Waste Management Safety:** Federal oversight during a waste repackaging and disposal evolution conducted at the Radioactive Waste Management Complex in July 2011 resulted in findings on Conduct of Operations and Integrated Safety System management.
- **Communications:** Stovepipes still exist within NSTec that reduce its effectiveness and impact activities. NSTec needs to continue to improve and enhance communications and resource utilization between the various NSTec organizations and with their customers.

5.3 Governance Improvements

Introduction

The contractor demonstrated a high level of leadership within NNSA and the Nevada Enterprise (NvE) to further reform efforts under the Governance Initiative.

Achievements

NSTec played a key role in the furtherance of the NNSA Governance Initiative through their support to the NNSA Requirements Analysis Working Group (RAWG). Their support included providing mentoring and assisting in the development and delivery of training on developing and populating requirements analysis crosswalks to other NNSA sites. NSTec also provided leadership and key expertise to the significant directive revision process undertaken by DOE this past fiscal year. Heavy support was provided to the accelerated review of key directives during the first and second quarter of the year. NSTec analyzed and prepared over 35 documents supporting the NNSA Enterprise Operating Requirements Review Board (EORRB).

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NSTec also demonstrated their ability to conduct performance improvements that will result in verifiable efficiencies in each of the following three categories:

- HQ approved directive change
- Local directive change
- Internal NSTec controlled processes

Areas Requiring Improvement

None Reported

III. STRETCH PERFORMANCE MEASURES

Based on the achievement of an aggregate score above 85% on the Base Performance Measures, NSTec is eligible to earn stretch fee. The following is a summary of NSTec's performance against the FY2011 Stretch Performance Measures.

MEASURE 2.0: FY2011 OBJECTIVES – STRETCH

2.1 Waste Mgmt Operations – Mixed Waste Disposal Unit

Introduction

The contractor significantly exceeded expectations in minimizing impacts on mixed waste (MW) generators during transition of disposal operations to a new mixed waste disposal unit (MWDU) at the NNSS.

Achievements

Construction and commencement of operation were accomplished within budget and ahead of the stretch target date of December 31, 2010. Because NSTec supported the preparation of a RCRA Part B Storage Permit application, NSO was able to obtain the MWDU permit and commence waste storage on December 1, 2010. Consequently, NSO was able to maintain its capability to accept mix waste from off-site generators throughout the DOE Complex.

Areas Requiring Improvement

None Reported

2.2 Security – Classified Footprint Reduction

Introduction

The contractor provided exceptional execution in reducing the site security footprint to include reducing unnecessary facilities and surplus material by over 10%.

Achievements

NSTec reduced unnecessary facilities and surplus materials (classified parts, documents, vault type rooms (VTRs), etc) to ensure a “cradle to grave” reduction of classified matter. The contractor significantly exceeded expectations for this objective by exceeding the goal of 10%. This was accomplished on schedule and under budget.

The CMCC transferred 48 documents (classified film) to LANL and reduced 164 sq ft of space at the NNSS with the reduction of LA space at CP-9 (-541 sq ft) and standing up the LA at building 6-900 (+377 sq ft). The current footprint reduction achieved was 10.22%.

Areas Requiring Improvement

None Reported

2.3 IT Strategic Plan Milestones

Introduction

The contractor exceeded nearly all the award criteria for developing an NvE Board approved, 5-year strategic plan designed to support mission needs at the NNSS. The contractor successfully executed a major project for the upgrade and expansion of the existing network infrastructure. This project was completed on time, on budget, and within scope.

Achievements

NSTec allocated \$1.2M to the Information Services Division (ISD) in April of 2011 in support of its IT modernization initiatives. ISD was able to execute a substantial upgrade and expansion of the legacy network infrastructure. The success of this project has created a high speed infrastructure capable of supporting future technology deployments of wireless, SharePoint, and a virtual desktop infrastructure.

Areas Requiring Improvement

None Reported

2.4 Defense Experimentation and Stockpile Stewardship (DE&SS) Mission Goal – Advanced Hydrodynamic Experiments Diagnostics

Introduction

The contractor demonstrated significant dedication, innovation and project execution in the accomplishment of the required diagnostic deliverables. The contractor successfully supported and coordinated the necessary activities in order to meet the established goals within the specified requirements.

Achievements

Two hydrodynamic diagnostic elements, an Advanced Optical Cavity (AOC) and a Many Point Photon Doppler Velocimetry (MPDV) diagnostic system, have been designated by LANL to be a primary diagnostic for the first experiment in the Gemini Sub Critical Experimental series. NSTec successfully implemented (designed, fabricated, and integrated) a field-ready diagnostic system, and characterized the
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system on Lab-specified hydro/shock experiments, and delivered data to Lab POCs to compare performance against experiment requirements.

The advanced optical cavity was successfully fielded at LANL on two Optical Dome (Hemi) shots conducted during the week of August 22nd. The modified “Fisheye” probe was fielded on the second of two successfully executed LANL Optical Dome experiments within the same week. The Quick Look Analysis Tool successfully supported all three Los Alamos experiments this FY.

Areas Requiring Improvement

None Reported

2.5 JASPER Hot Shot Execution

Introduction

The contractor provided exceptional support and results to the National Security Program in support of the JASPER Hot Shot Execution by exceeding technical requirements and meeting overall cost, schedule and technical expectations.

Achievements

The stated performance objective was to apply formal, documented project management principles and coordinate with the national laboratory to develop a fully integrated and maintained project management baseline in order to meet the target to conduct a minimum of one hot shot in FY 2011. JASPER Shot 90, a SMN experiment, was successfully completed on September 14, 2011. In order to accomplish this milestone JASPER completed a Contractor Operational Readiness Review (ORR) in June followed by a Federal ORR in July. The Federal ORR resulted in only one pre-start finding. This level of success can, in large part, be attributed to NSTec’s persistence in developing and implementing a new readiness program with direct involvement of management and subject matter expertise.

JASPER received authorization to operate as a Hazard Category 3 non-reactor nuclear facility on August 25, 2011. This was significantly sooner than the project management baseline of December 6, 2011. The September 14, 2011, execution of the first hot shot exceeded the stretch requirement to complete the shot by September 30, 2011. This was well ahead of the December 20, 2011 project management baseline.

Areas Requiring Improvement

None Reported

MEASURE 6.0: MULTI-YEAR STRATEGIC OBJECTIVES – STRETCH

6.1 Back Office Consolidation

Introduction

To fortify the foundation of a One Nevada Enterprise, the contractor was required to coordinate with other NSO contractors to develop a proposal to improve efficiencies of back office functions leading to a

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reduction in cost to NNSA/NSO. The contractor formed teams comprised of NvE members (NSO, NSTec, the Protective Force contractor, and the Environmental Services contractors) to address the consolidation of back office functions in the areas of administration, information technology and training. The contractor was able to achieve outstanding results even though there was often considerable resistance from the NvE players in consolidating functions.

Achievements

Key achievements included:

- **Administration:** Consolidated a consistent internal messaging and communications protocol that is applicable for the Nevada Enterprise contractors, eliminating redundant messages for all contractors. Leveraging procurement volume pricing, and blanket lease agreements amongst the Nevada Enterprise contractors.
- **Information Technology:** Developed plan to implement an IT pilot to provide email services across multiple contractors in FY 2012. Received NNSA Chief Information Officer (CIO) concurrence to transition NSO off the DOECO network to the NSTec network.
- **Training:** Developed the FY 2012 pilot plan to transition NSO Technical Qualifications into the NSTec Plateau Learning Management System for tracking and reporting. This action will eliminate redundancies in training courses among Nevada Enterprise contractors and the agreement to share course design and development when applicable to more than one contractor (e.g., web-based training for the Annual Security Refresher) will result in cost savings.

Areas Requiring Improvement

None Reported

6.2 Requirements Flow-Down System

Introduction

The contractor significantly exceeded expectations in their effort to develop and implement an enterprise requirements flow-down system that provides traceability from requirements to implementing procedures. The successful implementation of this system will allow the contractor to demonstrate how requirements are satisfied.

Achievements

NSTec developed and implemented an aggressive plan to accomplish the targets which included development of the system architecture requirements, selection of software, CONOPS (Organizational paradigm for sustainability), and development of an implementation plan resulting in a functional enterprise system. A demonstration of the system was provided to the NSO Executive Council on September 19, 2011.

In addition to the development and implementation of the requirements flow-down system, NSTec also planned for the sustainment of the system after implementation. NSTec benchmarked Requirements Management Systems at LLNL, Pantex, Y-12, Sandia, and LANL to gain a better understanding of the resources required to sustain the program. They specifically identified what makes their programs successful, the improvements they have made, future plans for their programs, challenges they face, metrics they report, R2A2, and their change management processes. In addition, over 40 NSTec personnel have been trained on the system and will be responsible for maintaining the requirements links for the requirements within their respective areas.

Areas Requiring Improvement

None Reported

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| 6.3 Governance Improvements |
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Introduction

The contractor successfully completed requirements improvement events and initiated the implementation processes associated with multiple DOE/NNSA HQ approved directive changes, local directive changes, as well as internal contractor controlled processes. An added complexity was the need to incorporate the other NvE players into the requirements improvement process for many of the events. This was necessary because of the integrated nature of the various contractors at the NNSS.

Achievements

During the performance year, NSTec initiated improvement events on six HQ directives, four local NSO directives, and a number of internal processes. As a result of completed and pending implementation of various changes initiated in FY2011, NSTec has achieved a mix of process stabilization, small to significant one-time cost savings or avoidance, and small to significant on-going cost savings or avoidance.

In addition to the results already achieved, the requirements improvement approach used by NSTec has had the added benefit of fostering the cultural change that will be necessary to engrain the Governance concept. Assembling the various subject matter experts from across the NvE to develop process improvements has promoted understanding of issues and resulted in team members developing solutions to shared concerns.

Areas Requiring Improvement

None Reported

IV. MULTI-SITE PERFORMANCE MEASURES

| | | |
|--------------|--|-------------|
| MS-01 | Enterprise Integration | |
| 2.1 | KC Plant Relocation | PASS |
| 2.2 | Enterprise Reengineering Activities | PASS |

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|-----|------------------|------|
| 2.3 | Wireless Project | PASS |
|-----|------------------|------|

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|-----|-------------------|------|
| 2.4 | BMAC Cost Savings | PASS |
|-----|-------------------|------|

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|--------------|----------------|
| MS-02 | Science |
|--------------|----------------|

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| 3.1 | NIF | PASS |
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| 3.2 | Demonstrate Key Physics | PASS |
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|-----|--------------------|------|
| 3.3 | Barolo Experiments | PASS |
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V. AWARD TERM INCENTIVE (ATI) PERFORMANCE MEASURES

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| ATI-01 – Science Campaign |
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Introduction

NSTec significantly exceeded expectations by completing the FY 11 scheduled activities contained in the JASPER 5% confidence integrated schedule. Fully integrated project management activities allowed the successful execution of the JASPER special nuclear material (SNM) Shot 90 three months ahead of the project management baseline. The JASPER projects data was entered to the federal database and managed under strict change control processes established by NSO and NSTec. The new change control process enhanced communication between NSO and the project teams to ensure proper baseline control.

Achievements

The deliverable for this ATI states that “This measure will be achieved when NSTec demonstrates its capability to manage the work scope in accordance with its documented and validated project management procedures and meets the key deliverables identified on the JASPER 50% CONFIDENCE INTEGRATED AND CONTROLLED BASELINE SCHEDULE.” This deliverable was met and significantly exceeded when JASPER conducted Shot 90 on September 14, almost three months ahead of the December 6 goal.

As required by the ATI, NSTec entered the JASPER baseline into the NSO system at the work package level and strict change control with performance status provided on a monthly basis. All construction activities were completed and the new control system was installed and validated as required.

JASPER successfully implemented the NSTec Readiness process that incorporated lessons learned from Barolo and CEF (now National Criticality Experiments Research Center (NCERC)). Not only was the CORR completed, but the ORR was completed with only one prestart finding.

Areas Requiring Improvement

None reported

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ATI-02 – Energy Management – Multi-year Plans for Site Sustainability

Introduction

The Energy Program guidance stems from the Department of Energy's Strategic Sustainability Performance Plan (SSPP) and is implemented at the local level in the Site Sustainability Plan (SSP). The Energy Program handshake document contained 28 deliverables with due dates. NSTec met all deliverable dates and consistently exceeded expectations with excellent performance.

Achievements

- NSTec developed a SSP draft and final per NNSA/HQ guidance and submitted them per DOE/HQ requirements. NSTec submitted the ATI deliverables of a mid-year status report and a final report which documented NSTec's success in meeting or exceeding all of the interim energy-related targets and deliverables.
- All interim goals were exceeded for electrical power consumption, potable water production, petroleum fuel consumption, and renewable fuel consumption. As a result, NSO is ahead of the straight-line goals for the 2015 endpoint.
- NSTec completed the installation of meters per the FY2011 Metering Plan in addition to completing the planned energy and retro-commissioning audits.
- Installation of a new car wash in Mercury using Energy Management funds is viewed as performance above and beyond expectations. The car wash installation resulted in 89k gallons of water being saved and increased GSA revenue to Fleet Services of \$58k.
- NSTec was proactive in improving the cooling of the B-3 communications closets by reducing the required units from 25 to 7.
- NSTec developed Energy Awareness Training to be used in Employee Orientation to communicate the role of employees in supporting the NSO energy program.

Areas Requiring Improvement

None reported

ATI-03 – Indirect Cost Management

Introduction

The contractor exceeded the requirements of this ATI through their completion of the performance year at approximately \$1M under the negotiated indirect baseline target. This is exceptional in that this was accomplished while also absorbing unbudgeted costs in a number of areas.

Achievements

In addition to beating the negotiated indirect baseline target, NSTec also absorbed budgeted indirect costs in the following areas: Formality of Operations Improvement Plan unbaselined labor, execution of Hill 200 Engineering, Port Gaston Cabling Project, Nuclear Operations Directorate unbaselined labor, and NNSS Wild Land Fires.

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NSTec achieved increased transparency through quarterly financial metric reviews with management from NSO, M&O Contractor, and Office of Financial Management and Budget, Financial Management Division.

In addition to meeting the indirect cost target, NSTec was also required to improve their Risk Prioritization Process (RPP). In FY 2011, the RPP was improved upon by implementing automation through a new planning tool and identifying details at the resource level. NSTec provided the comprehensive FY 2012 budget recommendation and prioritization report to NSO management on July 11, 2011. NSTec also provided NSO with detailed reports and an analysis of the process. To support governance reform and share best practices across the NNSA complex, NSTec presented their RPP to the NNSA Principal Deputy Administrator, the Contractor Financial Management Alliance and key LLNL financial staff.

Areas for Improvement

None Reported

ATI-04 – Formality of Operations Improvement Project (FOIP)

Introduction

NSTec achieved all performance award criteria and met overall cost, schedule, and technical performance requirements associated with the Formality of Operations Improvement Project (FOIP) ATI performance targets. Over the course of FY 2011, the contractor successfully implemented a comprehensive strategy with commensurate actions to bring nuclear safety and operations at the NNSA into full compliance with federal requirements and DOE directives.

Achievements

NSTec successfully executed the FOIP using a disciplined project management approach in accordance with the approved Project Execution Plan and associated performance schedule. All performance targets documented in the FOIP Effectiveness Indicators Handshake Agreement (NSTec correspondence E000-MB-0007, dated March 31, 2011) were met in overall mission performance, financial performance, and personnel resource application effectiveness.

FOIP improvement actions were fully integrated with nuclear and non-nuclear processes and activities at the Nevada National Security Site (NNSA). Implementation was coordinated across both mission directorates and functional organization boundaries. The management approach involved clearly articulated work scope executed in well-defined topical improvement areas (control accounts) that included Project Integration, SMP, Organization, Corrective Action Process, Management Attention, Nuclear Principles, Training, and Requirements Management. All performance expectations associated with the topical improvement areas were met.

In addition, the following specific performance measures as defined in the FOIP Effectiveness Indicators Handshake Agreement were fully met:

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- (1.) NSTec declared Readiness to Operate as a Hazard Category 3 Facility on July 11, 2011, and the ORR team subsequently recommended that JASPER Facility operations be authorized to restart following NNSA/NSO validating effective implementation of the corrective actions (NNSA ORR Final Report dated July 27, 2011). NSTec requested restart approval for SNM operations at JASPER on August 8, 2011 (Stephen Younger letter E000-SY-0148).
- (2.) FY 2011 PEP performance for Sub-Measures 3.1 through 3.4 were rated Very Good to Excellent.
- (3.) Customer satisfaction surveys from internal and external customers were conducted in the areas of CONOPS, Design Engineering, and DE&SS Project Satisfaction with the Laboratories with positive results in all areas.
- (4.) Metrics/indicators for all areas identified in the handshake agreement were developed and are available on the NSTec Dashboard.

Areas Requiring Improvement

None Reported

ATI-05 – Defense Experimentation and Stockpile Stewardship (DE&SS) Project Management

Introduction

The intent of this measure is to improve NSTec's project management in the areas of Campaigns/DSW and Readiness in Technical Base and Facilities. Over the course of this year there has been a tremendous improvement exceeding expectations.

Achievements

This measure has two sub-elements; one addressing Campaigns and Directed Stockpile Work (DSW) and the other Readiness in Technical Base and Facilities (RTBF).

Stockpile Stewardship Campaigns and DSW: The data for the selected projects, JASPER, Barolo, and Phoenix, were entered into the NNSA/NSO system as required and appropriately managed.

RTBF: The data for the selected facilities, DAF, JASPER, U1a, HE Facilities, and CP, were entered into the NNSA/NSO System as required and appropriately managed.

There was a significant improvement in NSTec's management of the work and the oversight of all NSTec work scope as a result of this measure. The NSTec process was integrated with the NSO Baseline Change Control (BCC) process. While there were growing pains interfacing with the NNSA/NSO System, NSTec successfully addressed the issues. There have been continuous improvements in the BCC process resulting in NSO gaining additional insight into NSTec's performance. Contractual issues between LLNL and NSTec made full integration of cost data for the JASPER RTP extremely difficult but an integrated schedule, managed by NSTec was achieved.

Areas Requiring Improvement

None Reported