



National Nuclear Security
Administration

Triad National Security, LLC

Performance Evaluation
Report (PER)

NNSA Los Alamos Field Office
(NA-LA)

Evaluation Period:
November 1, 2018 –
September 30, 2019

December 12, 2019

Executive Summary

This Performance Evaluation Report (PER) provides the National Nuclear Security Administration (NNSA) assessment of Triad National Security, performance of the contract requirements for the period of November 1, 2018 through September 30, 2019, as evaluated against the Goals defined in the Performance Evaluation and Measurement Plan (PEMP). The NNSA took into consideration all input provided (e.g. CAS, Program Reviews, etc.) from NNSA Program and Functional Offices both at Headquarters and in the field.

For Goal 1, Triad exceeded many of the Objectives and Key Outcomes with accomplishments that greatly outweigh issues, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate.

For Goal 2, Triad met the Objectives and Key Outcomes with issues that slightly outweigh accomplishments. In particular, Triad failed to ensure safe and secure execution of subcontractor work under the source recovery program in Seattle which greatly impacted the University of Washington, and delayed important programmatic activities to secure radioactive sources in FY 2019 and FY 2020.

For Goal 3, Triad exceeded almost all of the Objectives and Key Outcomes, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate.

For Goal 4, Triad exceeded almost all of the Objectives and Key Outcomes, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate.

For Goal 5, Triad was challenged in several areas including serious subcontractor management, oversight, and safety issues, Enduring Waste Management, formality/conduct of operations, construction safety, and MC&A compliance. Overall, Triad experienced numerous repeat issues, impacting progress towards becoming a learning organization.

For Goal 6, Triad exceeded many of the Objectives and Key Outcomes with accomplishments that greatly outweigh issues, and continues to balance mission with safety and operational excellence, and they continue to emphasize professionalism and partnership with NNSA as they meet highly difficult and long-standing challenges.

Performance against the Goals summarized below, resulted in an overall rating of Good for Triad National Security. Specific observations for each Goal are provided in the following pages.

Goal 1: Mission Execution: Nuclear Weapons-- Successfully execute Nuclear Stockpile mission work for Defense Programs work in a safe and secure manner in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.
Triad Nuclear Security, LLC Amount of At-Risk Fee Allocation: \$8.02M

Under this goal the contractor earned a rating of Very Good with a percentage of 90%. Triad exceeded many of the Objectives and Key Outcomes with accomplishments that greatly outweigh issues, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. No significant issues in performance exist.

In accordance with NNSA direction, Triad reprioritized their efforts to support development of a complex-wide pit production plan prior to development of the LANL plan. Triad subsequently identified to NNSA that they could not meet their contractual requirement to provide an integrated baseline to manufacture 30 war reserve pits at LANL within the specified six month period. They requested and were granted contractual relief reducing the requirement from providing an “integrated baseline” to providing an “integrated schedule” and from achieving the 30 pit per year capability “1 year ahead of schedule” to providing a “list of opportunities to accelerate the schedule.”

Accomplishments:

LANL, in partnership with Lawrence Livermore, successfully met the Level One Milestone completion criteria for developing simulation capabilities for Secondary Off-Nominal Performance, culminating a two-year effort supporting the Stockpile Capabilities Delivery Schedule, and received accolades from the review committee for thoroughness of the work and exceptional project development and execution.

LANL achieved a completion rate of 99.4% for Defense Programs Level 2 milestones, with completion of 157 milestones (and four cancellations) against 162 assigned for FY19.

LANL provided the Cycle 24 (FY19) Director’s Annual Assessment Letter to the Secretaries of Energy and Defense on September 30th.

LANL completed five Pit Manufacturing Development Builds and is on-track with equipment installations to support First Production Unit and 30 pits per year capacity. Additionally, LANL worked with the Design Agency to align Development and Certification Schedules to achieve the assembly Qualification Engineering Release and the First Production Unit in FY 2023.

LANL provided excellent support for nuclear weapon life extension programs, modifications, alterations, and future programs, including the B61-12 LEP, W76-1 LEP, W76-2, W88 ALT 370, W88 ALT 940, and the Next Navy Warhead. Significant achievements include;

(b)(7)(E), (b)(7)(F)

The Advanced Sources and Detectors project, supporting the Enhanced Capabilities for Subcritical Experiments, achieved CD-1 and delegation of CD-3A. LANL advanced Stockpile Responsiveness efforts by accelerating the processes for fielding a hydrodynamic experiment of a clean-sheet design, including use of new approaches to diagnostics.

LANL used the Trinity Supercomputer to complete first ever high-fidelity 3-D simulations of weapons features to support a Significant Finding Investigation. Additionally, LANL's Eulerian Application Project delivered a new breakthrough that provided a 100% runtime speedup in weapons simulations in the Common Modeling Framework. Lastly, LANL released the Request for Proposal for the Crossroads Supercomputing platform and completed the Vendor Selection Review Process.

LANL has completed remediation of the final containment vessel in the CVD Campaign at the Chemistry and Metallurgy Research facility, and NNSA has noted a positive trend in PF-4 Vault De-inventory progress.

LANL utilized the National Ignition Facility to execute experiments that confirmed the influence of heterogeneous mix on burn seen in NIF capsule fusion simulations, and achieved all FY19 ICF milestones

(b)(7)(E), (b)(7)(F)

LANL completed all planned pit surveillance activities in FY19, with final reports delivered by the end of the fiscal year. The Laboratory further advanced surveillance activities by developing and demonstrating the combination two diagnostic techniques to enhance surveillance of Canned Sub-Assemblies.

Issues:

LANL produced plutonium castings to enable Science Campaign milestones related to plutonium aging and pit production science, however the castings were not able to be further processed causing a delay in completing the Pu Science activities. LANL worked with Defense Program and negotiated a change to the Level II milestone from FY19 to FY20.

Goal 2: Mission Execution: Global Nuclear Security- Successfully execute authorized global nuclear security mission work in a safe and secure manner to include the Defense Nuclear Nonproliferation, Nuclear Counterterrorism, and Counter Proliferation and Incident Response missions in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans. Triad Nuclear Security, LLC Amount of At-Risk Fee Allocation: \$3.44M

Under this goal the contractor earned a rating of Satisfactory with a percentage of 25%. Triad met the Objectives and Key Outcomes with issues that slightly outweigh accomplishments. In particular, Triad failed to ensure safe and secure execution of

subcontractor work under the source recovery program in Seattle which greatly impacted the University of Washington, and delayed important programmatic activities to secure radioactive sources in FY 2019 and FY 2020.

Accomplishments:

LANL effectively supported global counter-proliferation goals by providing export control and counter-proliferation training, by meeting Off-Site Source Recovery Program recovery goals, and by implementation of the new Type B container for source recovery activities. LANL supported the National Security community by jointly leading the Foreign Nuclear Weapons Intelligence Initiative and providing assessment products to the broader counter-proliferation and intelligence communities.

(b) (7)(E), (b) (7)(F)

LANL executed three experiments in the Dry Alluvium Geology Series of the Source Physics Experiment, and initiated planning for the Physics Experiment 1 supporting the Low Yield Nuclear Monitoring program. LANL also supported the multi-lab Portal Monitor for Authentication and Certification project.

LANL completed production of 100 kg of plutonium oxide and utilized the Advanced Recovery System to process swap material and legacy turnings for facility material management.

LANL successfully hosted the Marble Challenge 19-02 national level field exercise,

(b) (7)(E), (b) (7)(F)

Triad continues to provide highly competent advice in identifying isotope enrichment technologies for actinide elements and sought out the expertise of retired specialists who supported the Mark 18A Target Recovery project. LANL hosted a scenario-based training activity for a national Plutonium Verification Team at TA-55, utilizing a mock deployment scenario for a familiarization visit in a real plutonium processing facility.

Issues:

Triad did not ensure effective procurement, flow down of requirements, selection, oversight, and management of the subcontractor performing work on Triad's behalf as part of the source recovery program. This was perpetuated in the immediate aftermath of a release of Cesium-137 in Seattle, Washington by Triad's subcontractor, when Triad was slow to take responsibility to mitigate the incident as the holder of the subcontract. Once engaged, Triad effectively managed the ongoing, complex cleanup and recovery operations. The multi-million dollar costs to respond to the breach and remediate the affected facilities forced the Office of Radiological Security to delay important programmatic activities to secure radioactive sources in FY 2019 and FY 2020. An assessment of the applicability of

the Conditional Payment of Fee clause will be made after release of the Joint Investigation Board's full report of the incident, expected in late 2019.

Goal 3: DOE and Strategic Partnership Projects Mission Objectives--Successfully execute high-impact work for DOE and Strategic Partnership Projects Mission Objectives safely and securely. Demonstrate the value of the work in addressing the strategic national security needs of the U.S. Government.

Triad Nuclear Security, LLC Amount of Fixed Fee Allocation: DOE \$4.3M SPP: \$2.6M

Under this goal the contractor earned a rating of Excellent with a percentage of 99%. Triad exceeded almost all of the Objectives and Key Outcomes, and met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. Triad's accomplishments significantly outweigh very minor issues and no significant issues in performance exits.

Accomplishments:

Triad utilized its unique nuclear research and development capabilities and acknowledged leadership in MicroReactor design, to provide technical assistance relative to scaling up TerraPower's design to support energy security goals.

LANL delivered the SuperCam instrument to NASA for the Mars 2020 Rover Mission. LANL also successfully executed a NASA project named Compact High-Resolution Trace-Gas Hyperspectral Imagers with agile on-board processing.

LANL was rated as "excellent" from the Office of Science for projects such as science research on rapid lake draining, Basic Energy Sciences recognizing the innovation and potential application of Squeezed Quantum Dots. Triad discovered a new reactor-liner alloy material that offers strength and resilience.

Triad defined an initiative to work to improve efficiency and procedural compliance of the core/integrated processes related to the authorization of SPP and DOE Projects.

Issues:

Production issues resulted in the inability to meet DHS FY19 plutonium pucks delivery requirements.

Goal 4: Mission Execution: Science, Technology, and Engineering (ST&E)--

Successfully advance national security missions and advance the frontiers of ST&E. Effectively manage Site Directed Research and Development (SDRD) and Technology Transfer, etc. in a safe and secure manner in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Triad Nuclear Security, LLC Amount of Fixed Fee Allocation: \$18.0M

Under this goal the contractor earned a rating of Excellent with a percentage of 99%. Triad exceeded almost all of the Objectives and Key Outcomes, and met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. Triad's accomplishments significantly outweigh very minor issues and no significant issues in performance exits.

Accomplishments:

Triad's National Security Education Center held 14 mission critical/relevant Summer Schools with attendance of 173 students; sponsored 56 Postdocs; and supported four university degree programs, providing a noteworthy contribution to maintaining a healthy and vibrant research environment.

Triad executed a Cooperative Research and Development Agreement with Chevron Energy Technology to develop 3-D Hydromechanical modeling code Hybrid Optimization Software Suite to optimize oil and gas recovery in primarily unconventional oil and gas reservoirs.

LANL staff received significant awards and recognition including: LANL's Kilowatt Reactor using Stirling Technology (KRUSTY) team was awarded the "Gears of Government President's Award"; two Lab researchers won Women in Technology awards; and LANL submitted significant number of entries (eleven). Triad also received nine R&D 100 awards as well as three Special Recognition Category Awards.

Issues: None

Goal 5: Mission Enablement-- Effectively and efficiently manage the safe and secure operations of the Los Alamos National Laboratory while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; successfully executing cyber and physical security requirements, and assure mission commitments are met with high-quality products and services while partnering to improve the infrastructure. Performance will be measured by the contractor's assurance system, NNSA metrics, cost control, business and financial operations, project baselines, implementation plans, assessment and audit results, etc., with a focus on mission enablement.
Triad Nuclear Security, LLC Amount of At-Risk Fee Allocation: \$6.9M

Under this goal the contractor earned a rating of Satisfactory with a percentage of 50%. Issues slightly outweigh accomplishments. Triad was challenged in several areas including serious subcontractor management, oversight, and safety issues, Enduring Waste Management, formality/conduct of operations, construction safety, and MC&A compliance. Overall, Triad experienced numerous repeat issues, impacting progress towards becoming a learning organization.

Accomplishments:

Triad developed and implemented a TA-55 De-inventory Plan and effectively collaborated with stakeholders resulting in successful TRU waste shipments, improving TRU waste storage conditions and reducing the risk of mission interruption. Triad received praise on multiple external waste management assessments. Triad continues to engage with NNSA, DOE-EM and CBFO to secure off-shipment schedules from RANT to WIPP. The TRU waste inventory work-off plan provided in FY19 was well-received and used as an example to other sites in the Complex.

Triad's execution of the National Environmental Policy Act (NEPA) program remained highly effective in providing both transparency and quality deliverables. Triad executed

the initial Manhattan Project National Historic Park (MAPR) public tours and completed all 15 cultural resource surveys associated with the Norton Line.

Triad exhibited a high level of responsiveness to quality issues raised as a result of safety basis document reviews. Triad completed startup of the Radioassay and Nondestructive Testing (RANT) facility to support waste shipments to the Waste Isolation Pilot Project.

LANL's Institutional and Weapon Quality Management Systems continue to demonstrate positive progress in the development of metrics which capture leadership focus and priority with basis to track improvement over time.

Triad's radiation protection program maintained a high level of performance, with exceptional performance noted in tracking and trending sub-reportable events (i.e., RCT pipeline, tracking and trending sub-reportable events, production safety in high-explosive [HE] pellet pressing facility, and radiation work permit process improvements), while HE safety performance continued to improve.

Triad is improving Criticality Safety Evaluations for new construction, excavation and decommissioning gloveboxes resulting in a simplification of criticality safety limits. Triad has fulfilled its commitment to complete assessments of all outstanding criticality safety evaluations (CSEs) for LANL PF-4 operations.

LANL advanced NNSA initiatives by proactively responding to indirect-funded data requests, providing consistent updates to the Mission Dependency Index and BUILDER™, and creating innovative new analytical tools.

Triad delivered efficient, effective business operations, financial management, budget formulation and execution with appropriate internal controls. Triad's support of the Nuclear Security Enterprise recruitment strategy was outstanding. Triad is implementing diversity acumen into their HR practices, creating a diverse and inclusive organization. Triad worked to increase the hiring and retention of certain hard-to-fill positions including Radiological Control Technicians, Special Materials Machinists, and Waste Management Coordinators through avenues such as new recruitment processes, compensation reviews, and incentive programs.

Triad exceeded the FY19 Small Business and Supply Chain Management Goals. Triad hosted two subcontract forums for local vendors on upcoming procurements. Triad implemented procurement improvements to include hiring an additional 25 buyers, transitioned to new procurement software, and deployed a new organizational system to integrate procurement and programmatic staff resulting in better acquisition planning.

Triad created a high-performing Interface Management Office to facilitate the finalization of Service Agreements/Work Authorizations and Operation Control Areas. Triad worked collaboratively with NNSA to address landlord concerns to integrate and effectively support EM mission at LANL.

Triad provided excellent legal and subject matter support at the Discharge Permit 1132 10th circuit hearing and the water rights lease contract negotiations. With the issuance of a Temporary Permit from NMED to discharge treated wastewater from the Radioactive Liquid Waste Treatment Facility, Triad is implementing superior treatment methods which is more protective to the environment.

Triad is leading the Enterprise counter unmanned aircraft system to meet program objectives and FAA requirements. The program is maturing and efforts to document lessons learned is invaluable towards moving to a robust security enterprise. LANL is making great strides in identifying and executing requirements in support of the 30 pits per year mission by increasing security resources. LANL has improved integration between weapons production and NMC&A program which has increased productivity between inventory periods; however, additional integration is required to optimize operations and MC&A. LANL continues to have a strong Physical Security System and Protective Force programs that was recently validated. There were positive improvements in cycle time in termination of safeguards of material.

Triad met or exceeded expectations in 15 of 17 Cybersecurity and 15 of 16 Information Technology Implementation Factors. Triad has taken positive steps to develop a classified wireless requirements document for use in manufacturing facilities, receiving accolades from the Telecommunications Security Program.

Even with increased mission scope and staffing, along with increased energy and water use, Triad still met sustainability expectations.

LANL's Continuity of Operations program achieved 99.98% accountability to include LANL staff, crafts, and protective force personnel. This was a noteworthy accomplishment considering LANL's substantial workforce and allows for nearly 100% accountability of personnel through a new process in an original, real-world event.

LANL has increased sensitivity to conditions requiring entering the New Information and Potentially Inadequate Safety Analysis processes. This decreases time at risk for safety concerns and issues in unknown or new conditions as information is gathered and the situation is stabilized and evaluated.

Issues:

Conduct of operations weaknesses remain evident in operational performance in nuclear facilities as evidenced by procedural violations and criticality safety process deviations. Triad has not proven to be a learning organization as evidenced by many significant repeat events including lifting events that, among others: 1) resulted in serious worker injury at the ECCCE project; 2) resulted in a worker requiring surgery when a large graphite cylinder dropped in Sigma; and 3) a worker injury at the steam plant when operators were improperly using lifting equipment. Other examples of repeat incidents to include lockout-tagout issues, transuranic waste drums tipping over, 55-gallon drum lid ejections, failure of workers to obey low oxygen alarms, and inadvertently penetrating electrical conduits.

Triad experienced several safety and subcontract management issues both on and off-site including a breach of a sealed source causing a release of Cesium-137 in Seattle, Washington resulting in multi-million dollar cleanup costs and delays in important programmatic activities. Triad failed to ensure effective procurement, flow down of requirements, selection, oversight, and management of the subcontractor performing this source recovery work on Triad's behalf. Subcontractor personnel did not demonstrate an understanding of the hazards nor the necessary hazard controls associated with removing the source from the source holder. Work planning and control and conduct of work were poorly implemented and ineffective. This hands-off approach to subcontract management and its oversight obligations was perpetuated in the immediate aftermath of the Cesium-137 release by Triad's subcontractor, when Triad was slow to take full responsibility to mitigate the incident as the holder of the subcontract. Other subcontractor safety issues included a door removal without RCT controls, improper penetrations cutting into electrical circuits, breaching a sealed source, and encountering both subsurface and above ground utilities, increasing project cost. Additionally, seventy percent of the 30 small projects in execution over \$1M are experiencing schedule issues, a declining trend. Triad does not have a comprehensive list of projects or subcontracts, resulting in inaccurate data. Triad was ineffective in ensuring applicable ES&H contract requirements were executed during project activities and does not have an effective mechanism to apply appropriate oversight resources based on risk and hazards during various phases of construction projects. Additionally, Triad was not timely in conducting safety event causal analysis.

Triad struggled in implementation of an effective transuranic waste management program which utilizes all available resources to handle and store waste. By not utilizing all available resources, such as the Transuranic Waste Facility to store transuranic waste, Triad increased risk to the core mission facilities at TA-55 inconsistent with the Enduring Waste Strategy and TA-55 De-Inventory Plan.

While Triad showed general improvement in MC&A compliance, (b)(7)(E), (b)(7)(F) Additionally, the Laboratory failed to submit a required process monitoring draft implementation plan by the June 2019 deadline.

Triad implemented a number of initiatives to decrease Incidents of Security Concern (IOSC) and educate its employees about security practices and vulnerabilities; however, LANL experienced several months in which IOSCs were elevated, not only beyond average rates, but well above historical figures. LANL has seen the highest IOSC totals of Category A and B incidents in the past three years. This is a cause for concern, as many of the incidents had the potential to be more severe. (b)(7)(E), (b)(7)(F)

(b)(7)(E), (b)(7)(F)

(b)(7)(E), (b)(7)(F) Triad's OCIO "Did Not Meet Expectations" on 3 Implementation Factors as identified in the Program Execution Guidance.

Triad is not implementing effective and timely corrective actions for National Pollutant Discharge and Elimination System/Clean Water Act compliance. Triad received multiple notice of violations (NOVs) from various regulatory agencies for waste management.

Triad continued to delay the schedule for disposition of the four mixed waste Flanged Tritium Waste Containers (FTWCs) at Area G. Triad did not effectively prioritize work execution resulting in multiple schedule delays, increasing safety risk as well as the potential of not meeting State and Federal permit requirements.

Triad did not meet small business goals for Small Disadvantaged Business and Women-Owned Small Business. Additionally, Triad was late submitting several contractual deliverables and did not follow procedures on an external assignment jeopardizing regulatory relationships with the State.

Triad continues to have numerous cost overruns, for direct-funded work in G2, many of which remained outstanding for several months, was delayed in meeting recapitalization project milestones and only completed 46% of planned projects.

LANL continued to have quality issues with lease justifications, market data and analysis and integrating real estate projects with NNSA staff, which resulted in significant delays during the lease review and acquisition process. Triad has failed to develop a plan to address Real Property Asset Management (RPAM) guidance which would point to new policies, procedures, and systems consistent with DOE orders and directives.

Triad only met expectations on three of seven capital asset projects. TA-55 Reinvestment Project Phase III's integration with TA-55 mission and projects remain an open risk. The Transuranic Liquid Waste project was slow to restart and CD 2/3 was not delivered. Exascale Class Computing Cooling Equipment project suffered incidents relating to safety and quality.

Goal 6: Mission Leadership—Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, cultivating a Performance Excellence Culture that encompasses all aspects of operations and continues to emphasize safety and security, improving the responsiveness of Los Alamos National Laboratory leadership team to issues and opportunities for continuous improvement internally and across the Enterprise, and parent company involvement/commitment to the overall success of the Los Alamos National Laboratory and the Enterprise.
Triad Nuclear Security, LLC Amount of At-Risk Fee Allocation: \$4.6M

Under this goal the contractor earned a rating of Very Good with a percentage of 80%. Triad exceeded many of the Objectives and Key Outcomes with accomplishments that greatly outweigh issues, and continues to balance mission with safety and operational excellence, and they continue to emphasize professionalism and partnership with NNSA as they meet highly difficult and long-standing challenges.

Accomplishments:

Triad, in partnership with NNSA, was recognized as having a “best-in-class” governance system by a team of peers. Triad was specifically commended for notable practices including governance roundtables with the workforce, joint governance briefing “All-Hands” with NNSA, and linked objectives and initiatives to the Administrator’s governance model.

Triad executed Plutonium Sustainment Program activities to achieve all documented milestones towards developing a War Reserve pit production capability, with the exception of the Process Monitoring plan, as well as leading the development of the baseline designs and employee training development for the Savannah River Site facility.

Triad leadership set a strong tone around safety culture, and has taken significant steps to plan and execute cultural change by implementing a new Chief Operating Officer model to help drive learning culture and training Senior Laboratory and NNSA Leaders through LANL Operations Supervisor Academy and other safety culture training. Although benefits are yet to be realized, Triad is focused on transparent communications addressing safety incidents, demonstrating a culture in positive transition to achieve improved operational discipline.

In response to their subcontractor’s performance that resulted in a release of Cesium-137 in Seattle, Washington Triad provided needed legal and subject-matter expert support. Triad’s effort to establish and maintain a trusting relationship with the University of Washington avoided additional negative impacts to the Department’s Offsite Source Recovery Program and the Cesium Irradiator Replacement Project.

LANL accepted a new role as the Containment Vessel Design and Procurement authority for the NNSA Complex, due to historical weaknesses in the procurement of vessels for explosively driven special nuclear material experiments. LANL’s efforts have led to incremental improvements to vessel procurements, however the vendor continues to experience challenges in delivery. LANL executed this additional work with no negative

(b)(7)(E), (b)(7)(F)

LANL is effectively leveraging parent company resources in the areas of leadership, contractor assurance, independent oversight, safety, and training, with the aim of ensuring skills sustainably meet mission needs. Triad Leadership engages in communities of practice reviews of its facility stewardship responsibilities, creating a consistent, high-performing culture within the several facilities’ disciplines. As part of governance, Triad and its Corporate Board worked closely with NNSA and stakeholders to identify opportunities to improve performance. Triad demonstrated its commitment to enhanced strategic engagement through a multitude of platforms, most notably through routine weekly Lab performance leadership discussions among LANL Director and Deputy Directors.

LANL executed plans to strengthen its contractor assurance system, specifically with improving independent reviews, stronger coordination across LANL with assurance activities, benchmarking with parent company practices, enhancing institutional policy and guidance tools, ensuring effectiveness of integrated management systems, creating data-driven decision-making streams, and maximizing utilization of existing processes such as employing LOSA principles in its Management Observation and Verification (MOV) efforts. NNSA recognizes that demonstrating measurable results with all these efforts is a multi-year prospect, and is encouraged with the initial efforts to develop effectiveness indicators.

LANL is developing a new risk management approach integrated with NNSA's Enterprise Risk Management efforts, and is taking steps to improve the level, rigor, and timeliness addressing issues by implementing an internal assessments and oversight group that is focusing on addressing critical functions. Finally, LANL is building more robust trending and analysis tools to address the most major risk areas. LANL's consistent use of key risk indicators and risk mitigation strategies demonstrated in-depth understanding of risk complexities while developing solutions for addressing and prioritizing risk management efforts. These efforts resulted in a highly risk-informed assessment schedule for FY2020.

LANL is leading the Advanced Sources and Detectors project to establish an enhanced experimental capability at the U1a Complex and an update and streamline safety evaluation guidance for 1 Point safety in nuclear explosive safety operations at the Pantex Plant.

Issues:

Triad leadership aggressively pursued implementation of change in many areas however encountered situations where they did not engage and obtain an NNSA position prior to engaging outside entities (e.g. Science Advisor to the State of New Mexico, Site Master Plan). Triad failed two Obligational Control Levels by spending more than they were legally allowed to on two projects. Triad violated SPP regulations and failed to obtain contract authority to participate in a \$45 million procurement initiative with private industry for supplying a small nuclear reactor prototype to DoD. This was discovered by LANL and mitigated prior to formalization.

LANL continues to identify and address weaknesses in its Contractor Assurance System, but there are organizations across LANL that are less robust and lack adequate contractor assurance. The issues management system does not have the capability to categorize issues at entry, therefore the system is unable to adequately trend across the institution, inhibiting the identification of areas for possible improvement. In addition, LANL does not have an adequate contractor assurance system in place for real property asset management and Triad must bring more transparency and collaboration with federal staff on issues such as land conveyance and infrastructure planning and execution to ensure alignment exists.

Triad leadership continued executing an awareness campaign to improve category A and B incidents of security concern, overall the number of security incidents remained high. LANL does not have a timely notification process for missing, lost, or stolen government furnished property which jeopardizes prompt investigation and disposition.

Triad is not consistently delivering adequate quality and signature ready documentation; examples include, the submission of subcontracts, contractual requirements, regulatory documents, some safety basis submittals, leases, etc., delaying the process for federal review and approvals nor is Triad performing adequate due diligence on submittals.