The National Nuclear Security Administration (NNSA) has completed its assessment of Consolidated Nuclear Security, LLC, performance of the contract requirements for the period of October 1, 2017, through September 30, 2018, as evaluated against the Goals defined in the Performance Evaluation and Measurement Plan (PEMP). Based on assessments provided in the NNSA Performance Evaluation Report, award fee amounts are as follows:

<table>
<thead>
<tr>
<th>Goal Description</th>
<th>At Risk %</th>
<th>Available</th>
<th>Final</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Manage the Nuclear Weapons Mission</td>
<td>35%</td>
<td>$13,976,550</td>
<td>$12,718,661</td>
<td>91%</td>
</tr>
<tr>
<td>Goal 2: Reduce Nuclear Security Threats</td>
<td>10%</td>
<td>$3,993,300</td>
<td>$3,793,635</td>
<td>95%</td>
</tr>
<tr>
<td>Goal 3: DOE and Strategic Partnership Projects Mission Objectives</td>
<td>5%</td>
<td>$1,996,650</td>
<td>$1,896,817</td>
<td>95%</td>
</tr>
<tr>
<td>Goal 4: Science, Technology &amp; Engineering (ST&amp;E)</td>
<td>5%</td>
<td>$1,996,650</td>
<td>$1,896,817</td>
<td>95%</td>
</tr>
<tr>
<td>Goal 5: Operations and Infrastructure</td>
<td>30%</td>
<td>$11,979,900</td>
<td>$9,583,920</td>
<td>80%</td>
</tr>
<tr>
<td>Goal 6: Leadership</td>
<td>15%</td>
<td>$5,989,950</td>
<td>$5,450,855</td>
<td>91%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$39,933,000</td>
<td>$35,340,705</td>
<td>88.5%</td>
</tr>
</tbody>
</table>

In addition, the fixed fee and total fee summaries are provided below for your information:
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Fee</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>SPP (Fixed Fee)</td>
<td>$998,046</td>
<td>$998,046</td>
</tr>
<tr>
<td>Total Fixed Fee</td>
<td>$998,046</td>
<td>$998,046</td>
</tr>
<tr>
<td><strong>Total Summary</strong></td>
<td><strong>$40,931,046</strong></td>
<td><strong>$36,338,751</strong></td>
</tr>
</tbody>
</table>
Executive Summary

This Performance Evaluation Report (PER) provides the National Nuclear Security Administration (NNSA) assessment of Consolidated Nuclear Security, LLC (CNS) performance of the contract requirements for the period of October 1, 2017, through September 30, 2018, as evaluated against the goals defined in the Performance Evaluation and Measurement Plan (PEMP). 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.

Performance against the goals summarized below resulted in an overall rating of Excellent for Consolidated Nuclear Security, LLC. Specific observations for each goal are provided in the following pages.

CNS earned Excellent ratings on Goals 1, 2, 3, 4, and 6, exceeding almost all of the Objectives to successfully deliver on our nation’s stockpile requirements (achieved 102% of the overall negotiated baseline quantities) and the balance of the NNSA mission portfolio including Non-Proliferation, Emergency Management, and Incident Response Training while overcoming multiple challenges, including aging infrastructure, equipment issues, weapon-specific technical issues, workload/recapitalization project alignment challenges, and weather events. In addition, CNS performed high impact work to support DOE and Strategic Partnerships. CNS successfully produced Plant Directed Research and Development deliverables and advanced critical mission-enabling technologies, exemplified by uranium and lithium technologies including microwave casting, multi-mass leak detection, and induction brazing. CNS demonstrated strong leadership commitment to the mission, improved its performance excellence culture, responded to conditions and events that generated opportunities for learning, and demonstrated the ability to collaborate to enhance mission performance across the DOE complex.

CNS earned a Very Good rating on Goal 5, exceeding expectations on many Objectives and Key Outcomes. CNS ensured Operations and Infrastructure were maintained and available to meet assigned missions while improving the overall condition of site infrastructure and responding well to key equipment failures. Environment, Safety, Health & Quality performance continued to improve. The safeguards and security program demonstrated effective performance. CNS made program improvements to safety basis and cyber security, yet struggled to meet expectations in both areas.
Goal 1: Manage the Nuclear Weapons Mission-- Successfully execute Nuclear Weapons mission work in a safe and secure manner in accordance with DOE/NNSA Priorities, Program Control Document and Deliverables, and Program Implementation Plans, and Weapon Quality Assurance Requirements. Integrate across the Pantex/Y-12 Plants, while maintaining a DOE/NNSA enterprise-wide focus, in order to achieve greater impact on a focused set of strategic national security priorities.

Consolidated Nuclear Security, LLC % At-Risk Fee Allocation: 35%

Under this goal, CNS earned a rating of Excellent, and 91% of the award fee allocated to this goal. CNS exceeded almost all of the Objectives and Key Outcomes and met overall cost, schedule, and technical performance requirements under this goal. Accomplishments significantly outweighed issues. Specific performance on the key deliverables achieved follows:

<table>
<thead>
<tr>
<th>System</th>
<th>Total FY 2018 Baseline Percent Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>W76-1 LEP Warhead Deliverables</td>
<td>100%</td>
</tr>
<tr>
<td>W76-1 Canned Subassembly (CSA)</td>
<td>101%</td>
</tr>
<tr>
<td>Base Surveillance – PX</td>
<td>101%</td>
</tr>
<tr>
<td>Base Surveillance Y-12</td>
<td>105%</td>
</tr>
<tr>
<td>W87 LLCE</td>
<td>103%</td>
</tr>
<tr>
<td>Warhead Dismantlement</td>
<td>103%</td>
</tr>
<tr>
<td>CSA Dismantlement</td>
<td>106%</td>
</tr>
</tbody>
</table>

For the W76-1 Life Extension Program (LEP), CNS provided all deliverables to the Department of Defense and delivered three W76-1 Joint Test Assemblies (JTAs) ahead of schedule. During the period, three issues related to assembly arose that were within CNS control.

For the B61-12 LEP, CNS supported all Canned Subassembly (CSA) qualification and evaluation requirements that led to the receipt of the Qualification Evaluation Release for the CSA. CNS fabricated war reserve component parts and assembled multiple Nuclear Pilot Production (NPP) units that NNSA expects will yield the First Production Unit (FPU) ahead of the Performance Measurement Baseline (PMB). CNS made significant progress in completing tooling tasks, Type 5B units, Confined Large Optical Scintillator Screen and Imaging System (CoLOSSIS) evaluations, and main charge assembly. Pit Requalification equipment installation was completed. A critical subcomponent from Los Alamos National Laboratory was irreparably damaged during assembly on an Enhanced Fidelity Instrumented Hydro unit, resulting in the subsequent teardown and rebuild of the unit.

For the W88 ALT 370, CNS produced the component FPU 15 months ahead of baseline, completed the Initial Operating Capability quantities, and achieved steady-state production with early shipment of components to Pantex. CNS delivered four Pantex Tester development copies to Sandia National Laboratory ahead of the recovery schedule. CNS continued work to recover the Water Jet Project and CSA Radiation Cart. CNS completed the W88 Documented Safety Analysis Collaborative Authorization for the System Basis Total Lifecycle Environment (CASTLE) submission, enabling the ALT 370 activities to recover some of the FY 2018 schedule.

For the W80-4 LEP, CNS provided draft Weapons Design and Cost Report Point Estimates, Basis of Estimates, Key Milestones, Integrated Resource Loaded Schedules, and Cost Risk Analyses to support the development of PMBs and in preparation for transition to Phase 6.3. CNS completed the work scope on CSA de-bonding. Response to requests for material supply confirmation was not timely.
For Base Surveillance, CNS exceeded Surveillance and Limited Life Component Exchanges requirements. In relation to the W80 ALT 369, CNS exceeded all production schedules and shipments to the Air Force. CNS completed the FY 2018 requirements for the “50+10” Study, which included resolution of a container issue. Due to a Case Marking issue, two JTAs did not ship on schedule. In relation to Dismantlements and Disposition, CNS exceeded baseline requirements. CNS also exceeded CSA parts disposition by 25%.

CNS met all but two Level 3 milestones for Uranium Sustainment and all Area-5 Deinventory milestones. The missed milestones were related to Salt Vaporization Furnace installation in the Electrorefiner (ER) Development Glovebox and uranium reduction line isolation. CNS removed equipment from the machining area approximately three months early, disposed of 4.0 Metric Ton Units (MTU) from Area-5 approximately 3.5 months early and ultimately dispositioned 7.0 MTUs, and developed interim storage models for establishing Target Working Inventories. CNS obtained approval of the Nuclear Criticality Safety Determination for use of the Macrobag that will substantially make waste packing and transportation more efficient.

In Material Recovery and Recycle, CNS exceeded consolidation casting goals, produced high quality buttons, and reduced material at risk in Area 5 by 22,000 metal equivalents. The third largest amount of purified metal in 24 years was produced, but it was less than half of the fully funded FY 2018 milestone. CNS did not meet the briquetting milestone due to an extended pause in casting operations, but processed 50% more than in recent years, reducing the Material-At-Risk contribution to the FY 2014 level. The time needed to return casting lines to service following a pause, the denitrator being out of service for an extended period, and the inadequate Oxide Conversion Facility availability are indications that management of these assets needs significant improvement. Milestones for installing and testing Thermal Decomposition and Distillation were missed. CNS exceeded expectations for the rack reconfiguration project and for eliminating the carbon steel can inventory in the Highly Enriched Uranium Manufacturing Facility. Migration to a capability health storage management perspective has resulted in a comprehensive assessment of program health from which positive actions can be derived.

CNS met lithium sustainment deliverables and performed adequately. CNS provided a supply and demand gap and options analysis report. Specific recommendations from it were accepted by NNSA, and CNS is actively pursuing execution of these recommendations. CNS gained Design Agency approval on a new chemical specification that will lower the risk for material shortages. When combined with the other planned sustainment activities, these changes provide material through FY 2035.

CNS completed key technical support and Highly Enriched Uranium (HEU) processing milestones in support of the Domestic Uranium Enrichment Program and surety of uranium supplies for tritium production reactors. CNS completed all the approved FY 2018 Nuclear Material Management Team (NMMT) projects, NMMT milestones, and met all formal Office of Secure Transportation (OST) Task Agreements.

Overall, CNS performance in removing process wastes and a classified item from Building 9212 was satisfactory. There are significant variances of scope, schedule, and cost that are a continued trend from prior years. Continuing delays as reported in prior fiscal years impact funded tasks due to resource availability. This forced NNSA to direct a funds transfer from the classified item disposal project to viable projects that can cost funds in FY 2019.
Goal 2: Reduce Nuclear Security Threats—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. Integrate across the NNSA enterprise to achieve greater impact on a focused set of strategic national security priorities.

Consolidated Nuclear Security, LLC % At-Risk Fee Allocation: 10%

Under this goal, CNS earned a rating of Excellent, and 95% of the award fee allocated to this goal. CNS exceeded almost all of the Objectives and Key Outcomes and met overall cost, schedule, and technical performance requirements under this goal. Accomplishments significantly outweighed minor issues.

CNS accomplished highly-visible and challenging tasks, receiving special recognition from the NNSA Administrator and two Secretary of Energy Honor Achievement Awards in support of Defense Nuclear Nonproliferation. CNS exceeded the HEU disposition program milestones for HEU down-blending and discards projects and provided significant planning and inputs to the surplus plutonium Dilute and Dispose Lifecycle Cost Estimate. CNS completed 38 castings for the experimental material (exceeding the FY 2018 target of 28) and submitted to NNSA eight Casting Interim Data Reports critical to understanding the viability of a casting process. CNS successfully completed foreign HEU removal tasks and delivered containers to China for the Nigeria Miniature Neutron Source Reactor. CNS completed required actions in the Mobile Uranium Facility Management Transition Plan seven months ahead of schedule.

CNS completed the Warhead Measurement Campaign milestones, enabling measurements to be taken on a cross-section of the U.S. nuclear weapons stockpile, and bringing the high-profile project to completion. CNS successfully responded to an emerging task in the 2018 National Defense Authorization Act, putting a new project rapidly in place and coordinating with national laboratories and industry partners.

CNS provided excellent technical support to the Nuclear Compliance Verification Program and outstanding leadership for the U.S./UK Portal Monitor for Authentication and Certification as the overall multi-laboratory project lead. CNS also conducted 19 of 19 planned Alarm Response Trainings (ART), 5 of 5 customized ARTs, and 17 of 17 Personal Radiation Detector trainings. CNS’s international safeguards subject matter expertise advanced key NNSA and International Atomic Energy Agency efforts in training, concepts, and approaches.

CNS provided exemplary support to nuclear forensics capabilities, stabilization of new city deployments and existing city sustainment trainings. Additionally, CNS provided critical planning, and maintained demanding watch bill support, for national level Render Safe exercises. CNS responded effectively to radiological and nuclear incident and accident exercises. CNS effectively supported all National Special Security Event and Special Event Activity Rating 1 and 2 events. CNS met deliverables on time and effectively managed the Radiological Assistance Program according to national policy.
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.

Consolidated Nuclear Security, LLC At-Risk Fee Allocation: 5%

Under this goal, CNS earned a rating of Excellent, and 95% of the award fee allocated to this goal. CNS exceeded almost all of the Objectives and Key Outcomes and met overall cost, schedule, and technical performance requirements under this goal. Accomplishments significantly outweighed very minor issues.

CNS made excellent progress pursuing and performing high-impact work in support of DOE and Strategic Partnership Program mission objectives. Although work for some key customers, including Naval Reactors, Advanced Test Reactor (ATR), and Army reactor core production, had fallen behind schedule due to the casting suspension, CNS made extraordinary efforts and successfully recovered customer schedules. Of note, CNS exceeded the High Flux Isotope Reactor U3O8 production milestones and met all milestones for Naval Reactors, Idaho National Laboratory’s ATR, the Army Fast Burst Reactor Upgrade project, and other domestic and foreign research reactor uranium supply milestones.

CNS exceeded lithium-6 (Li-6) production milestones for strategic partners and secured an Authorized Limit for shipment of Li-6 with detectable uranium to decrease rejected product and reduce processing cost. CNS also successfully began operations of the Y-12 New Brunswick Laboratory Center, assuming responsibility for the storage and distribution of uranium certified reference materials to laboratories and facilities around the world. CNS was able to design, procure, and install the facility to achieve operational readiness in less than a year.

CNS provided excellent support to other government agencies. CNS delivered all 44 U.S. Navy JTA units and completed all separation tests on time. CNS provided radiological source support to the U.S. Navy Training Evaluation Unit and training support to the Nuclear Explosive Ordnance Disposal team. CNS also provided training and technical support for the Department of Homeland Security and the Intelligence Community.
Goal 4: Science, Technology, and Engineering (ST&E)— Successfully advance national security missions and advance the frontiers of ST&E in accordance with budget profile, scope, cost, schedule and risk while achieving the expected level of quality, safety and security. Effectively manage Plant Directed Research and Development (PDRD) and Technology Transfer programs to advance the frontiers of ST&E.

Consolidated Nuclear Security, LLC % At-Risk Fee Allocation: 5%

Under this goal, CNS earned a rating of Excellent, and 95% of the award fee allocated to this goal. CNS exceeded almost all of the Objectives and Key Outcomes and met overall cost, schedule, and technical performance requirements under this goal. Accomplishments significantly outweighed very minor issues.

CNS did an outstanding job of targeting projects in support of core programs and productivity improvements, transformational technologies, and developing capabilities that promote continuous growth. The completed projects provided impactful improvements within high explosive manufacturing, weapons assembly and disassembly, and uranium and lithium processing. CNS has done an excellent job of incorporating their PDRD vision into long-term planning documents such as their strategic plan and technology roadmap. CNS has 48 FY 2018 PDRD projects that are on track for completion or transition to another funding source. CNS conducted the FY 2019 PDRD proposal call and portfolio selection process, which resulted in 69 funded projects. CNS successfully hosted two PDRD mid-year Program Reviews attended by personnel from the Atomic Weapons Establishment (AWE), Kansas City National Security Campus, Savannah River Site, and NNSA PDRD representatives. Of significance, participants finalized the draft U.S. NNSA PDRD/UK AWE Warhead Underpinning Technology (WUT) Interface Process Planning document.

CNS did an excellent job of advancing critical mission-enabling technologies, such as uranium and lithium technologies to include microwave casting, multi-mass leak detection, and induction brazing. Specifically, CNS successfully cast the first part for the White Sands Missile Range Fast Burst Reactor Upgrade project. CNS made advances in Depleted Uranium wire drawing capability. Despite falling behind schedule due to late delivery of laser gas exchange equipment (LGX), CNS focused efforts to successfully recover the qualification schedule for the FPU.

CNS made notable improvements to infrastructure and manufacturing capabilities. CNS emptied two gloveboxes in Building 9731 of all classified material and downposted the building to enable the transfer of this building to the U.S. Park Service. This also saved costs on subsequent construction activities. CNS installed equipment to crush drums formerly containing beryllium and radioactive materials at Y-12 that will increase the number of drums an ST-90 box can hold from four to 36, lowering disposal costs. CNS also developed a lithium salvage capability that reduced disposal costs. CNS completed installation of the 5-axis mill/lathe machine at Pantex.

CNS continued to publish and patent innovative work with ten papers accepted to be published by peer-reviewed journals and conferences. Eleven new patents were issued, and ten new patent applications were filed. Additional intellectual property activities included 36 technology agreements against a goal of 20, and 61 invention disclosures against a goal of 60.
Goal 5: Operations and Infrastructure—Effectively and efficiently manage the safe and secure operations of the plant while maintaining an NNSA enterprise-wide focus; demonstrate accountability for mission performance and management controls; assure mission commitments are met with high-quality products and services; and maintain excellence as a 21st century government-owned, contractor-operated facility.

Consolidated Nuclear Security, LLC % At-Risk Fee Allocation: 30%

Under this goal, CNS earned a rating of Very Good, and 80% of the award fee allocated to this goal. CNS exceeded many of the Objectives and Key Outcomes, and met the overall cost and technical performance requirements. Accomplishments greatly outweighed issues.

Integrated Safety Management and safety performance improved. CNS executed the chronic beryllium disease prevention program corrective action plan. Radiological contamination rates were the lowest since 2012, and down-posting of radiological areas at Y-12 exceeded goals. CNS supported High Explosives Pressing Facility process validation and start-up activities, identifying a path forward to address the electrical issue. CNS demonstrated strong integration with Design Agencies. Several product quality issues occurred, but were addressed promptly. Improvement is warranted with nonconformance management, Software Quality, and the Pantex calibration program. Improvement was noted in fire protection compensatory measures and assessments, while unresolved signals, unplanned systems/devices out-of-service, Pantex preventative maintenance, and Y-12 corrective maintenance backlog need improvement.

Nuclear safety program posture improved somewhat, but management attention is needed so that improvement continues. Pantex nuclear safety basis submittals required rework and extensive federal review. NNSA identified several issues which CNS has taken action to address. Late in FY 2018, CNS developed a strategic roadmap with corrective actions to improve quality of safety basis submittals and hazard control implementation, and also developed a Pantex safety basis supplement to address long-standing compliance issues. Significant efforts were made to consolidate the Unreviewed Safety Question (USQ) procedure and reduce the Pantex backlog. CNS discovered unexpected weaknesses in the criticality safety program, but the initial response was not timely. However, CNS later responded aggressively with robust extent of condition reviews and rigorous return to work processes. NNSA recognizes nuclear safety improvements at both sites, but progress was slow, improvement actions were accomplished late in the fiscal year, and issue identification was mostly event driven.

CNS met expectations on seven of nine capital asset projects, exceptions being the West End Protected Area Reduction (WEPAR) and Electro Refining (ER). CNS met the WEPAR CD-1 package delivery date under budget, but subpar quality documents required adjustments to comply with requirements. The ER CD-2/3 package required rework that will impact the CD-2/3 approval. CNS provided strong support developing the Material Staging Facility CD-0 and CD-1 packages and the High Explosive Formulating Facility CD-0 package information request. CNS completed 92 General Plant Projects compared to the initial planned work scope of 74. Process improvement initiatives included improved up-front project planning documentation, designs, and execution efforts, and development of a five year plan for operations and maintenance. CNS missed Direct Chip Melt milestones. Areas for improvement include reporting building and trailer inventory information, G2 reporting for indirect and Other Direct
Costs for recapitalization projects, and execution of Bay/Cell modernization portfolio.

Effective protection of special nuclear material and classified matter was demonstrated. CNS successfully completed comprehensive assessment and limited notice performance tests for DOE’s Office of Enterprise Assessments, negotiated the protective force bargaining union contract, ensured that security requirements were met during the move to the John C. Drummond Center (JCDC), and properly responded to real-world events. CNS successfully addressed some longstanding security infrastructure issues and completed the installation of new equipment at the Destruction and Recyclable facility to support classified/sensitive information destruction. Emergency Management demonstrated improvements. While improvements were noted for information protection (IP), budget, and technical security, continued management attention is warranted. Issues were noted in the K-1065D facility assessment.

CNS work on infrastructure systems improved overall condition, with good responses to key equipment failures. Use of predictive maintenance technologies and preventive maintenance optimization coupled with establishment of an oil analysis laboratory, provided efficiencies and cost savings. The on-line craft training program was expanded. Utility Availability remained high and with backlog essentially constant. Preventive Maintenance completion percentage was consistently below acceptable levels. Maintenance-related quality/conduct of operations errors continued to be an issue. CNS exceeded current goals of increasing clean and renewable energy while reducing energy intensity, and also performed well toward achieving sustainable acquisition, greenhouse gas reduction, water management, and support of ESPC projects.

CNS improved business performance and provided integrated services, delivering efficiencies and cost savings. Cost savings interactions increased deliverable quality and mutual understanding of expectations. CNS must improve timeliness and accuracy in post-verification financial reporting and the estimation process for Cost Reduction Initiatives. CNS implemented a single financial system integrating business operations, improved charging practice documentation and guidance, and initiated a General and Administrative rate deep dive with other NNSA contractors to analyze costs resulting in a useful tool for NNSA operational cost analysis. CNS increased and optimized storage capacity to meet future programmatic needs, and implemented vendor managed inventory to increase availability and reduce cost. CNS achieved 69.8% versus a 50% Small Business Goal. Legal delivered efficient and effective management of risk and successfully concluded a potential class action regarding retiree healthcare benefits.

Information Technology (IT) improved as exemplified by the seamless transition to the JCDC and the federal systems refresh. The IT service support construct improved noticeably in maturity and service level. NNSA remains concerned with the timing and prioritization of major IT projects as CNS balances sustainment of day-to-day performance with long-term investment. NNSA also remains concerned with the CNS Cyber Security performance. While corrective actions resulted in some improvements, CNS’s Cyber Security Program introduced unnecessary risk to NNSA. Considerable work remains, demonstrated by numerous issues identified in program assessments.
Goal 6: Leadership—Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, improving safety culture, the responsiveness of Contractor 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 plant and the Enterprise.

Consolidated Nuclear Security, LLC % At-Risk Fee Allocation: 15%

Under this goal, CNS earned a rating of Excellent, and 91% of the award fee allocated to this goal. CNS exceeded almost all of the Objectives and Key Outcomes and met overall cost, schedule, and technical performance requirements under this goal. Accomplishments significantly outweighed very minor issues.

CNS demonstrated exemplary, unified leadership to execute national security missions, with positive mission impacts captured in Goals 1 – 3. CNS displayed strong unity of purpose, and activities such as Enterprise Risk Management scoring and priority setting, monthly Organizational Health Reviews, and the first Ten-Year Strategic Plan were noteworthy demonstrations of leadership team capabilities. CNS leadership worked collaboratively with NNSA to respond to events that had potential mission impact, resulting in improved performance and a greater awareness of vulnerabilities. There was evidence of secondary benefits to the facilities, the people, and the operations. CNS must build on these experiences to further transition into an organization that finds challenges before the challenges find them. While demonstrating excellent event-driven leadership, progress was made to “build ahead” throughout the period to minimize impacts of unforeseen yet inevitable process upset conditions, as evidenced by the lessening of the production “hockey stick curve” and a reduction in “cliff hanger” year-end finishes.

CNS instilled positive organizational culture in a variety of ways. The Governance Peer Review noted that “…the team identified a governance system with attributes that are well defined, understood, and implemented. As with any dynamic system, continuous improvements are ongoing and evident.” A key contributor was the continued roll out of the Performance Enterprise System concepts and expanding value stream applications. From a ‘culture without borders’ perspective, CNS embraced the Safety Academy For Excellence program, contributed to the DOE Safety Culture Improvement Panel at Senior Executive to middle-management levels, and shared lessons learned during the Lawrence-Livermore National Laboratory Governance Peer Review. CNS further developed the relationships with the NNSA and other Enterprise contract partners. The Enterprise Logistic Management System expanded to five sites and was an Enterprise leader for integration. Examples include the Safeguards & Security and Emergency Services Community of Practice, planning and hosting the Weapons Integration Summit, and co-chairing the NNSA Operations and Efficiency Board.

CNS led the early completion and move to the JCDC, providing a modern, safe, and secure work environment for 1100 employees. CNS is supporting the NNSA Albuquerque Complex replacement project with lessons learned and design support information. CNS greatly improved the communication, coordination, and product delivery associated with cost savings program.

CNS must continue to focus on leadership at all levels to address long standing challenges. Two key areas of concern are Cyber Security performance and Safety Basis improvements.