

**Independent Oversight Review of
Nevada Site Office and National Security
Technologies, LLC, Line Oversight and
Contractor Assurance Systems Self-Assessment**



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Acronyms

CAS	Contractor Assurance System
CRAD	Criteria and Review Approach Documents
DNM	Does Not Meet
DOE	U.S. Department of Energy
FM	Fully Meets
FY	Fiscal Year
HSS	Office of Health, Safety and Security
LO	Line Oversight
LOCAS	Line Oversight and Contractor Assurance Systems
NAP	NNSA Policy Letter
NNSA	National Nuclear Security Administration
NNSS	Nevada National Security Site
NP	Noteworthy Practice
NSO	Nevada Site Office
NSTec	National Security Technologies, LLC
OFI	Opportunity for Improvement
PM	Partially Meets
REC	Recommendation

Independent Oversight Review of Nevada Site Office and National Security Technologies, LLC, Line Oversight and Contractor Assurance Systems Self-Assessment

1.0 PURPOSE

The purpose of this independent oversight review by the U.S. Department of Energy (DOE) Office of Enforcement and Oversight, within the Office of Health, Safety and Security (HSS), was to shadow¹ the Nevada Site Office (NSO) and the National Security Technologies, LLC (NSTec), line oversight and contractor assurance systems (LOCAS) self-assessment conducted September 19 – 23, 2011, at the Nevada National Security Site (NNSS). The NSO/NSTec self-assessment focused on: “1) the management and operating contractor’s performance in managing innovatively through its contractor assurance system (CAS) while continuing to deliver program results in a safe, efficient, secure, legally compliant, and environmentally sound manner, and 2) NSO’s performance in managing a performance-based line oversight program based on a graded approach consistent with associated risks and the contractor’s demonstrated performance.”

The review was conducted in accordance with the HSS *Office of Safety and Emergency Management Evaluations Protocol for Small Team Oversight Activities*, dated May 2011, and the HSS *Plan for the Independent Review of the Nevada Site Office and NSTec LLC LOCAS Self-Assessment*, dated August 25, 2011. Appendix C provides supplemental information about the HSS review.

2.0 BACKGROUND

DOE Policy 226.1B, *Department of Energy Oversight Policy*, and National Nuclear Security Administration (NNSA) Policy Letter NAP-21, *Transformational Governance and Oversight*, establish the DOE/NNSA policy for the assurance systems and processes established by DOE/NNSA contractors and the oversight programs performed by DOE/NNSA line management and independent oversight organizations. The objective of DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*, is to ensure that the CAS and DOE/NNSA oversight programs are comprehensive and integrated for the key aspects of operations essential to mission success.

NAP-21 identifies the principles, responsibilities, processes, and requirements that NNSA will use to transform and improve Federal governance and oversight of its contractors. Sites are expected to use this information as the basis for governance transformation in how NNSA conducts business. Chapter 8, *Validating Line Oversight (LO) and Contractor Assurance Systems (CAS)*, describes the elements of oversight and assurance and provides guidance for validating and affirming LO and CAS functionality and effectiveness.

As required by NAP-21, NNSA Headquarters and line management must perform an evaluation of the contractor’s CAS and the Federal LO program to validate and affirm their functionality and effectiveness at each site. NSO and NSTec conducted the joint LOCAS self-assessment to ensure that they are ready for a formal affirmation review. The team members were drawn from NSO, NSTec and NNSA. The self-assessment followed the expectations of NAP-21, Chapter 8, to identify any gaps in the NNSA expectations and prepare the team members for the LOCAS affirmation review.

¹ Shadowing is a specific type of oversight activity where HSS personnel observe a site office and/or contractor assessment and document HSS’s evaluation of that assessment.

3.0 SCOPE

The HSS shadowing of the NSO/NSTec LOCAS self-assessment focused on the site's compliance with DOE Policy 226.1B and NAP-21 and included document reviews, attendance at 14 review team personnel interviews, observations at a weekly NSTec Executive Leadership Council meeting, and attendance at the daily review team meetings. The HSS independent review was conducted utilizing the approved NSO/NSTec LOCAS self-assessment plan and criteria and review approach documents (CRADs). The CRADs were based on NAP-21 as modified at the request of the self-assessment sponsors and were not based on site-specific or contractual requirements. The LOCAS self-assessment plan also included appropriate criteria and lines of inquiry. Appendix B provides a list of key documents that were reviewed by the team.

4.0 RESULTS

NSO and NSTec adequately planned and executed the NAP-21 LOCAS self-assessment in accordance with DOE Policy 226.1B and NAP-21. The self-assessment scope and assessed criteria complied with the guidance contained in NAP-21, Attachment 4, *LOCAS Affirmation Objectives and Criteria*. The self-assessment team members' comprehensive review included extensive document reviews and more than 90 personnel interviews. The team identified 24 opportunities for improvement (OFIs), 14 recommendations (RECs), and 10 noteworthy practices (NPs). As an observed noteworthy practice, HSS determined that the integration of site office and contractor staff on the teams for each assessed element, along with reviewing documents and interviewing personnel from both the site office and contractor organizations, provided a more comprehensive LOCAS review than two separately focused reviews for LO and CAS might have accomplished.

The self-assessment rated six elements to evaluate the implementation and effectiveness of the CAS: assessments, operating experience, issue and corrective action management, performance measures, integrated continuous improvement, and CAS training. The ratings were defined as fully meets (FM), partially meets (PM), or does not meet (DNM). It should be noted that the rating criteria for this review does not indicate a pass or fail grade, but rather the expert judgment of the self-assessment team on the level of maturity that the LOCAS has achieved. A rating of FM indicates that LOCAS is mature, transparent, routinely used, and drives both sustainment and continuous improvement. A rating of PM indicates that most of the LOCAS system components are in place and implemented, but they are not executed in a routine or repeatable manner. The review team rated all six CAS elements as FM.

The self-assessment rated five elements to evaluate the implementation and effectiveness of the Federal LO system: LO approach, LO process, oversight of the CAS, LO self-assessment, and LO training. The review team rated three of five LO elements as FM and two elements (i.e., LO processes and LO self-assessment) as PM. No elements for either CAS or LO were rated DNM.

The self-assessment team concluded that the NNSC LOCAS is ready for affirmation, based on the evidence presented, interviews and observations conducted, and the transparent and integrated management approach demonstrated by NSO and NSTec. Overall, the self-assessment team evaluated the NNSC LOCAS as effective in supporting mission execution in a safe, secure, legally compliant, and environmentally sound manner; their conclusion was clearly demonstrated through verifiable performance results.

Further details about the LOCAS self-assessment and the identified issues are contained in the final self-assessment report issued by NNSA/NSO and NSTec dated September 29, 2011. HSS concurs with the identified OFIs and RECs but had a few additional observations regarding integrated assessment planning, issues management, and the NSTec dashboard tool. These observations are discussed in

Appendix A and summarized below:

- NNSA’s expectations for its integrated assessment-planning model as described in NAP-21 should better emphasize the concepts of “balanced priorities” and “graded approach” to include all oversight activities and provide more credit as appropriate for routine oversight activities.
- The ongoing effort at NNSS to develop a more comprehensive and structured issues management system should continue, with continued NSO and NSTec senior management support to expedite implementation.
- Ongoing efforts to improve the dashboard should continue, but NSO and NSTec oversight staff at the working level should not place unrealistic expectations on this tool at this time, nor should senior management prematurely promote its use for purposes for which it was not intended or designed to accomplish.

According to NAP-21, “rigor and implementation of independent oversight for nuclear and high hazard activities will continue to be maintained and enhanced; oversight for other activities is graded consistent with the associated risks.” Also, “a fully functional CAS will allow both the contractor and the NNSA site office to monitor performance and tailor the level of necessary oversight based on demonstrated performance data.” At NNSS, the transformation from a directive-based to a risk-informed governance and oversight model over the past couple of years (principally as an NNSA pilot site that contributed to the issuance of NAP-21) has allowed the site office to optimize its oversight function by leveraging the data, information, processes, and outcomes of the CAS and governance system, while also enhancing Federal oversight for high hazard and nuclear activities. The transformation has also allowed NSTec management to use the CAS as a primary tool to measure, improve, and demonstrate performance and ensure that mission objectives and contract requirements are met.

5.0 CONCLUSIONS AND SUMMARY OF OBSERVATIONS

The HSS independent review concluded that the NSO and NSTec LOCAS self-assessment was adequately performed in accordance with DOE Policy 226.1B and NAP-21 expectations. The self-assessment properly concluded that the NNSS LOCAS is ready for affirmation and is effective in safely supporting mission execution. HSS concurs with the self-assessment team’s conclusions and identified OFIs and RECs but noted a few additional observations for NNSA’s and NSO’s consideration. HSS recognizes that NNSS is achieving the stated goals of NAP-21 governance transformation, demonstrating improved performance in both LO and the CAS, and providing assurance of safety for its nuclear and high hazard activities.

6.0 ITEMS FOR FOLLOW-UP

NNSA will conduct its LOCAS affirmation review of NNSS during the second quarter fiscal year (FY) 2012. HSS intends to monitor this planned external assessment as an operational awareness oversight activity.

**Appendix A
Summary of Observations**

Observation	Independent Oversight Comments	Opportunities for Improvement & Recommendations Discussed in the LOCAS Self-Assessment Report
1	<p>The site office and contractor are effective in planning and scheduling assessments based on evaluations and monitoring of multiple CAS data sources (e.g., caWeb, dashboard, performance evaluations, Occurrence Reporting and Processing System, lessons learned, etc.). The proposed assessment schedule for FY 2012 lists 567 total assessments for NSO and NSTec. HSS does not question the adequacy of the number of assessments planned, but does question whether NSO/NSTec have established an optimal balance between assessments (which require significant resources to schedule, plan, execute and document) and other routine oversight activities to promptly identify and resolve issues (e.g., issues and corrective action management programs, operating experience programs, operational awareness reports, performance measures monitoring, integrated continuous improvement programs). As an OFI, NNSA’s expectations for its integrated assessment-planning model, as described in NAP-21, should better emphasize the concepts of “balanced priorities” and “graded approach” to include all oversight activities and provide more credit as appropriate for routine oversight activities. Performance indicators with quantitative thresholds for increased oversight response (i.e., a formal systemic or programmatic assessment) could help strengthen routine oversight processes and help reduce the number of required assessments. As stated in NAP-21, “ultimately, as seemingly redundant, lower risk and less effective assessments are identified and reduced and/or eliminated, NNSA and Contractor resources can be realigned to direct NNSA mission activities.”</p>	<p>Required/Mandatory Assessments should be systematically identified using the definition of a Requirement found in the NSTec Glossary of Terms (OFI CAS/I - 1.3.1)</p> <hr/> <p>Improved assessment planning coordination with mission areas and between functional areas could result in a more comprehensive approach to the number of assessments currently being scheduled and will improve the overall quality. (OFI CAS/I - 1.3.3)</p>
2	<p>Previous assessments at NNSS have identified weaknesses with the issues management systems, which use the caWeb and ePegasus. NSTec is leading an effort to develop an enhanced system that may be used by both the site office and the contractor. For issues trending and analysis, the enhanced system should allow issues to be better identified and tracked under multiple mission areas and functional areas rather than restricted to a single-point selection. This effort to develop a more comprehensive and structured issues management system should continue, with continued NSO and NSTec senior management support to expedite implementation.</p>	<p>Multiple issues management systems may not be meeting all of the issue management and corrective action program requirements. (OFI CAS/I - 1.3)</p> <hr/> <p>NSO & NSTec are in the process of developing a single issues management system managed by NSTec. (NP LO/I - 1.1.2)</p>
3	<p>HSS concurs with the self-assessment review team’s identified dashboard issues:</p>	<p>Line oversight managers should consider</p>

Observation	Independent Oversight Comments	Opportunities for Improvement & Recommendations Discussed in the LOCAS Self-Assessment Report
	<p>“there is a gap or disparity in how the dashboard is viewed and used by line oversight to monitor and evaluate CAS.” The dashboard website is a relatively new CAS tool implemented over the past year; it was designed primarily as a tool for providing information to NSTec senior management, and is also viewed as a potentially useful oversight tool. However, the dashboard is not currently robust enough to provide real-time data for effective day-to-day line oversight. Ongoing efforts by NSTec to improve the dashboard should continue, but NSO and NSTec oversight staff at the working level should not place unrealistic expectations on this tool at this time, nor should senior management prematurely promote its use for purposes for which it was not intended or designed to accomplish. Current oversight should continue to rely upon the other CAS data sources and performance monitoring tools until the dashboard provides more information.</p>	<p>emulating the dashboard management model being employed by Assistant Manager for Safety and Security and Assistant Manager for Site Operations. (REC LO/E - 3.2)</p> <p>Consider development of training or an awareness campaign that explains the features of the dashboard, its intended use and how the data can assist in developing line oversight activity plans. (OFI LO/E - 5.1)</p>

Appendix B Documents Reviewed

- 10 CFR 830, *Nuclear Safety Management*, January 10, 2001 (as amended)
- 48 CFR 970.5223-1, *Integration of environment, safety, and health into work planning and execution*, December 22, 2000 (as amended)
- DOE Policy 226.1B, *Department of Energy Oversight Policy*, April 25, 2011
- DOE Order 226.1B, *Implementation of Department of Energy Oversight Policy*, April 25, 2011
- NNSA Policy Letter NAP-21, *Transformational Governance and Oversight*, February 28, 2011
- NA-1 SD 226.1A, *Line Oversight and Contractor Assurance System Supplemental Directive*, October 17, 2008
- NSO O 226.XC, *Assessment and Oversight*, October 27, 2010
- NSO O 412.X1E, *Real Estate/Operations Permit*, September 11, 2009
- NSO M 426.X-1A, *Safety System Oversight Program*, June 23, 2008
- NSO M 450.4-X, *Integrated Safety Management*, April 23, 2008
- *LOCAS Self-Assessment Plan For the Nevada Site Office and National Security Technologies, LLC At the Nevada National Security Site*, August 18, 2011
- *LOCAS Self-Assessment Report Nevada Site Office and National Security Technologies, LLC at the Nevada National Security Site*, September 29, 2011
- NTS Prime Contract DE-AC52-06NA25946, Clause H-2 Contractor Assurance System and H-4 Accountability
- *FY 2011 Annual Analysis Report, Contractor Assurance System*, July 2011
- *Nevada Site Office FY 2012 Assessment Implementation Plan*, Revision 0, September 19, 2011
- ACT-PAG-7.8.2009-59567-Report, *Report of NNSA Assessment of National Security Technologies Contractor Assurance System Effectiveness*, October 7, 2010
- CCD-QA09.001, *Management Assessment Program*, Revision 3, Aug 26, 2010
- CCD-QA10.001, *Independent Assessments and Surveillances*, Revision 1, August 31, 2010
- PLN-1087, *SMP Program Descriptions*, Revision 1, September 1, 2011
- PLN-1088, *Assessment Performance Objectives and Criteria for Site-Level Safety Management Programs*, Revision 1, September 1, 2011
- Memorandum, Eshleman to Dotson, *NAP-21 Gap Analysis*, July 29, 2011

Appendix C Supplemental Information

Dates of Review

Onsite Review: September 19 – 23, 2011

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