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THE SWIFT STALEY TEAM

CONTRACTOR ASSURANCE SYSTEM

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Effective Date: _____

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REVISION SUMMARY

Rev. No.	Description of Change	Pages	Date
Revisions 0 through 1 from previous contract.			
2	Revised to incorporate comments received from DOE on 11/18/15 (PPPO-02-3218433-16). Included adding new Section 7 and incorporating references throughout document. Sections changed were 1.3, 1.4, 2.5, 3.2, 3.3, 6.2, and Appendix A. Also changed organization chart (Figure 1) to include additional functional managers. Changed document number from SST.PUR-6001 to SSI.PUR-6001 per agreement with DOE for the new contract.	1, 2, 4, 6, 7, 9, and A-1	12/01/15
3	No significant changes. Updated document references. Updated organization chart. Added footnote to Table 1 to clarify inclusion of sub-tier service providers.	1, 4-6, 8, 10, 12	09/30/16
4	Revised to incorporate EFCOG Best Practices on Contractor Assurance System Effectiveness Validation. Incorporated applicable parts of SST Procedure 05.02.01, Integrated Oversight Program, to eliminate redundant processes. Incorporated ISO 9001 quality program concepts. Complete re-write.	All	09/29/17
5	Periodic review performed, updated to align with ISO 9001:2015, while maintaining requirements for NQA-1a-2009. Updated to reflect current practices. Formatted into new template, previous no. SSI.PUR-6001.	All	01/31/19
6	Integrated corrective actions.	11-13	07/09/19

ACRONYM LIST

CAIRS	Computerized Accident and Incident Reporting System
CAQ	Conditions adverse to quality
CAS	Contractor Assurance System
CMMS	Computerized Maintenance Management System
DOE	U.S. Department of Energy
DOELAP	U.S. Department of Energy Laboratory Accreditation Program
EFCOG	Energy Facilities Contractor Group
EM	Environmental Management
EMCBC	Environmental Management Consolidated Business Center
EMS	Environmental Management System
ES&H	Environment, Safety, and Health
IMS	Integrated Management System
ISMS	Integrated Safety Management System
IT	Information Technology
ITS	Issues Tracking System
KPI	key performance indicators
MBWA	Management by Walking Around
MIPP	Mission Information Protection Program
MRB	Management Review Board
NTS	Noncompliance Tracking System
O	Order
ODFSA	Officially Designated Federal Security Authority
OFI	opportunities for improvement
OPEX	operating experience
PGDP	Paducah Gaseous Diffusion Plant
PPPO	Portsmouth/Paducah Project Office
QA	Quality Assurance
RMFO	Records Management Field Officer
SCAQ	Significant Conditions Adverse to Quality
S&S	Safeguards and Security
SST	Swift & Staley Team
WISE	Webster’s Incredibly Safe Employees

1.0 PROGRAM IMPLEMENTATION AND MONITORING

1.1 Introduction

Swift & Staley Inc. (hereinafter referred to as Swift & Staley Team [SST]) implements a Contractor Assurance System (CAS) as required by U.S. Department of Energy (DOE) Order (O) 226.1B, *Implementation of Department of Energy Oversight Policy* (the Order) and DOE O 205.1B, Chg. 3, *Department of Energy Cyber Security Program*. SST incorporated guidance from the Energy Facilities Contractor Group (EFCOG) white paper, "Elements of a Contractor Assurance System" and EFCOG best practice, "Contractor Assurance System Effectiveness Validation" in developing this document. The SST CAS is tailored appropriately to the SST facilities and activities under Contract DE-EM0003733, *Paducah Infrastructure Site Services Contract* (the Contract).

1.2 Purpose and Scope

The CAS outlines how SST meets the key requirements of the Order[1].

- Work is performed safely, securely, and in compliance with all requirements.
- Risks are being identified and managed.
- Systems of control are effective and efficient.

The CAS also describes how SST meets these requirements. The CAS includes effectiveness evaluation of implementing processes and risk-based decision making, supported by a structured Issues Tracking System (ITS). ITS supports evaluation of issues for program-level concerns, conduct of cause analysis in a risk-based approach, timely corrective actions balanced with effective utilization of resources, and trending of issues to identify emerging problems or opportunities. The CAS also describes how SST complies with Cyber Security assurance program requirements.

The CAS is designed to provide DOE with information on the SST assurance activities and to assist DOE with developing an appropriate level of oversight. This CAS applies to all work performed by SST, and to SST subcontractors, suppliers, and vendors as delineated in the subcontracts or other procurement documents.

The EFCOG white paper, "Elements of a Contractor Assurance System," identifies the elements and key functions of an effective CAS. Appendix A provides the list of implementing documents for each of these elements and key functions. These documents support the SST key processes and objectives described in Section 2.0, which identify the methods SST uses to evaluate effectiveness of the CAS.

[1] DOE O 226.1B, Attachment 1, Contractor Requirements Document, Section 2, Requirements.

1.3 Coordination with U.S. Department of Energy

Per the Contract, SST submitted an initial CAS document and received DOE approval[2]. SST provides DOE with a revised document when significant changes are made, prior to the changes being implemented.

SST management reviews the data collected in support of the CAS quarterly through the Management Review meetings and through review of the quarterly CAS update reports prior to submittal to DOE. Per the Contract (Deliverable 17), SST provides DOE with quarterly CAS update reports for their information only.

SST makes information generated under the Contract available to DOE upon request. DOE is provided electronic access to systems, such as the ITS and the Computerized Maintenance Management System (CMMS), or SST provides data output reports as requested. SST also provides routine reports, such as the monthly listing of closed issues report, to DOE to provide information on status of CAS program elements. SST provides the Integrated Oversight Schedule (Appendix B) to support DOE planning of their external oversight.

2.0 KEY PROCESSES AND INTEGRATED MANAGEMENT SYSTEM (IMS) OBJECTIVES

SST has identified seven key processes that are used to execute work as required by the Infrastructure Support Services Contract. Table 1 summarizes these key processes and the objectives for each.

Table 1. Key Processes and IMS Objectives

	IMS Objectives			
SST Key Processes	**On-Time Delivery**	**Management**	**Service Quality**	**Green Business**
Project Management	X	X	X	X
Special Projects	X	X	X	X
Operations & Maintenance	X	X	X	X
Safeguards & Security		X	X	
IT, Telecommunications & Cyber Security	X	X	X	X
Radiological Control, Dosimetry & Training	X	X	X	
Records & Deliverables	X	X	X	X

IT = Information Technology IMS = Integrated Management System

[2] Letter from T. Hicks to T. Courtney, "CONTRACT NO. DE-3M0003733: RESPONSE TO RESUBMITTAL OF DELIVERABLE NO. 17 FOR CONTRACTOR ASSURANCE SYSTEM AND NO. 98 FOR ASSURANCE SYSTEM," PPPO-02-3218433-16A, dated November 30, 2015.

3.0 MEASUREMENT PLANS

SST has designed measurement plans to monitor key performance indicators (KPIs), allowing SST to analyze and evaluate progress over time. These plans, and the associated key process plans can be found in ISSC-PM-PL-004, *Key Processes and Measurement Plans*. These measurement plans define:

- What will be monitored and measured;
- The methods SST will use to monitor and measure the key performance indicators; and
- The frequency that the information will be collected and reported.

The KPIs will be tracked and reported per defined periodicity as part of the Management Review. Management action on any KPIs not tracking toward established goals will be documented in the Management Review Board meeting minutes and corrective actions entered into the ITS. The Quarterly CAS Update Report will contain tracking and trending information on the KPIs, before being reviewed by the senior management team and submitted to DOE each quarter by the end of the month following the end of each quarter.

4.0 CYBER SECURITY CONTINUOUS MONITORING

Cyber security provides system assurance through Continuous Monitoring (PGDP-IT-PO-002, *Security Controls for Information Systems Plan*). Continuous Monitoring is defined as maintaining ongoing awareness of information security, vulnerabilities, and threats to support organizational risk management decisions. Security control effectiveness is measured by correctness of implementation and by how adequately the implemented controls meet organizational needs in accordance with current risk tolerance (i.e., Is the control implemented in accordance with the security plan to address threats and is the security plan adequate?). The security status is determined using metrics established by Cyber Security in accordance with DOE regulations and industry best practices to convey the security posture for the Paducah site's information and information systems, along with organizational resilience given known threat information (ISSC-IT-PL-002, *System Security Plan for the Paducah, Kentucky Project Information Systems*).

Cyber Security performs Continuous Monitoring through the use of manual and automated processes. Organization-wide monitoring cannot be efficiently achieved through manual processes alone or through automated processes alone. Where manual processes are used, the processes are repeatable and verifiable to enable consistent implementation. Automated processes, including the use of automated support tools (e.g., vulnerability scanning tools, network scanning devices) can make the process of continuous monitoring more cost-effective, consistent, and efficient. Real-time monitoring of implemented technical controls using automated tools can provide the organization with a much more dynamic view of the effectiveness of those controls and the security posture of the organization. All implemented security controls, including

management and operational controls, are regularly assessed for effectiveness, even if the monitoring of those controls cannot be automated.

The SST Cyber Security group follows an aggressive self-assessment process that is heavily integrated with Quality Assurance (QA). SST Cyber Security utilizes an assessment template that crosswalks all the requirements to ensure that compliance standards are assessed thoroughly. In addition, the DOE Environmental Management (EM) Mission Information Protection Program (MIPP) Team and the Portsmouth/Paducah Project Office (PPPO) conduct independent assessments for SST through their Continuous Monitoring Visits to evaluate the Cyber Security programs for SST's classified and unclassified Information Technology (IT) systems. The results are provided to DOE and used to reauthorize the systems/boundaries. If the MIPP Team and the PPPO are unable to perform their annual assessment, SST has the capability to utilize corporate reach back to provide an independent assessor, and will provide the results of the assessment to DOE.

5.0 VALIDATION OF SYSTEM EFFECTIVENESS

SST evaluates CAS effectiveness using a combination of approaches.

5.1 Periodic Reports

The SST management team monitors CAS effectiveness through review of internal reports, as listed in Table 2.

Table 2. Internal Management Reports

Report Name	Frequency
Project Status Report	Daily
Open Actions Report	Weekly
Management Team Meeting Agenda and Notes	Weekly
Monthly Progress Report	Monthly
Invoice Performance Report	Monthly
Annual Data Report	Annually
ISMS/QA Declaration	Annually[3]
CAS Updates	Quarterly
NTS Reports	As issued
Management Review Board Meeting Minutes	Quarterly, and as issued
Occurrence Reports	As issued
Operating Experience Summary/Lessons Learned	As issued

ISMS = Integrated Safety Management System NTS = Noncompliance Tracking System

5.2 Peer Review

SST meets on a quarterly basis in face-to-face meetings with the infrastructure contractor from the Portsmouth Gaseous Diffusion Plant site. The Portsmouth

[3] Or as requested by DOE.

infrastructure contractor provides services similar to those provided by SST at Paducah. The meetings include sharing of lessons learned, best practices, issues and resolutions, and ideas for improving the efficiency of services to DOE. The quarterly meetings focus on specific areas of the contract. The senior managers from each company also hold conference calls, generally monthly.

5.3 Parent Company Assessment

As a small business, SST has limited corporate reach back resources to complete parent company assessment. The same situation exists with other DOE contractors. However, contractors at Paducah and Portsmouth have similar scopes of work, auditing needs, and auditing resources. Building on this common base, SST has been able to exchange auditing resources with the Portsmouth infrastructure contractor and local Depleted Uranium Hexafluoride conversion contractor as a means of achieving effectiveness and independent evaluation results similar to what a parent company assessment would provide.

5.4 Audits

Independent oversight of Contract performance by the QA organization or other personnel independent of the activity being reviewed is one measure used to provide validation of the effectiveness of the CAS. The Integrated Audit Schedule, provided in Appendix B, shows the initial list of planned audits to be performed. SST tracks these, and other audits added in response to management direction or emerging issues, in the ITS. SST independent audits are conducted in accordance with American Society of Mechanical Engineers Quality Assurance Requirements for Nuclear Facility Applications (NQA-1) standard, implemented by ISSC-QA-PR-011, *Nuclear Program Audits* and ISO 9001:2015 implemented by ISSC-QA-PR-010, *Audits*, depending on the application of the graded approach.

In addition, SST receives multiple independent reviews across all of the functional areas. Some of these reviews are listed below.

- Swift & Staley Inc. has recently obtained ISO 9001:2015 and ISO 14001:2015 certification, and has flowed these requirements down to the project level. SST could be subject to additional audits from corporate to ensure project level adherence to the ISO standards.
- U.S. Department of Energy Laboratory Accreditation Program (DOELAP) – DOE evaluates and certifies the SST radiological internal and external dosimetry programs to ensure that the services provided internally and to other prime contractors meet DOE requirements.
- DOE Headquarters performs audits of systems such as Facility Information Management System, IT Cyber Security, Safeguards & Security (S&S), and Environmental Compliance.
- The DOE PPPO conducts assessments of the SST Integrated Safety Management System (ISMS) and Environmental Management System (EMS), which include

additional Criteria Review and Approach Documents that cover areas such as QA, work control, and business management. PPPO also regularly reviews the Computerized Accident and Incident Reporting System (CAIRS) entries made by SST.

- The DOE Site Office conducts regular assessments and surveillances of SST activities. DOE Site Office personnel also conduct monthly reviews of closed issues to ensure effective corrective actions were taken and adequately documented.
- SST receives independent reviews in the Business Management area in the following areas:
  - Cost Incurred Audit
  - Accounting System Review, as necessary
  - Cost Proposal Audits, as required
  - Invoice Reviews monthly
  - Post Award Audit (one time after contract award)
  - Financial Audit performed annually by our Certified Professional Accounting firm
- The Environmental Management Consolidated Business Center (EMCBC) conducts reviews of the SST personal property management system for compliance with DOE and Federal Acquisition Regulation requirements and good industrial practices.
- The Records Management Field Officer (RMFO) from the EMCBC conducts reviews (generally annually) of the SST Records Management program. SST also meets with the RMFO generally monthly via telephone conference.
- The DOE Facility Representatives conduct walk-downs of SST facilities and activities.
- DOE EM MIPP Team conducts annual Continuous Monitoring visits to evaluate the Cyber Security programs for SST's classified and unclassified IT systems.
- PPPO serves as the Officially Designated Federal Security Authority (ODFSA) and conducts a formal site survey of the S&S Program at the Paducah Gaseous Diffusion Plant (PGDP) annually.
- ODFSA also conducts a formal review every year of the S&S Program using a formally submitted Comprehensive Self-Assessment completed by SST.
- ODFSA conducts an annual Independent Oversight for the classification and controlled unclassified information programs at the PGDP. DOE Headquarters provides oversight on an ongoing basis and can conduct visits as required.
- SST may receive oversight from other PPPO Prime Contractors that receive services from SST either through a Memorandum of Understanding or Work Authorization. SST may also work with the other Prime Contractors to request their independent review of SST activities.
- SST may request independent review of program elements. Typically these reviews are higher level reviews to identify issues and opportunities for improvement at the program level.

- SST is evaluated annually by the Associated General Contractors of America Self-Insurer's Fund for safe work practices for worker's compensation insurance.

5.5 Management Assessments

SST managers conduct self-assessment of activities for which they are responsible (ISSC-QA-PR-012, *Management Assessments*). These self-assessments are documented in the ITS. The formality, scope, and method of conduct of these self-assessments vary. The QA group reviews results to ensure nonconformities are identified, receive causal analysis and corrective action.

SST conducts self-assessment of the CAS through annual reviews of the CAS description document. SST also includes CAS elements in the annual ISMS and QA effectiveness reviews and declaration.

5.6 Supplier Audits

SST conducts audits of suppliers of items and services on a graded approach, per ISSC-QA-IN-005, *Supplier Audits*, and conducts Environment, Safety, and Health (ES&H) oversight in accordance with ISSC-ESH-PR-013, *ES&H Subcontractor Oversight Program*. SST maintains ISSC-QA-TD-006, *Qualified Suppliers List* which documents key suppliers who provide critical or high impact items and services (ISSC-QA-PR-007, *Quality Level Determination of Items & Services*). SST builds supplier evaluations around existing DOE program approvals such as the DOE Consolidated Audit Program and DOELAP. SST also recognizes accreditation and/or certification through a nationally recognized standard evaluation program, such as the National Voluntary Laboratory Accreditation Program, as part of the risk-based tailoring of supplier audits.

6.0 ISSUE AND CORRECTIVE ACTION MANAGEMENT

6.1 ISSUE MANAGEMENT

SST collects issues from a variety of sources, including:

- Audits
- Management (self) assessments
- Work control – employee feedback
- Hazard walk downs
- Management by Walking Around (MBWA)
- Employee suggestions
- Employee concerns
- Project Manager meetings with employees ("Talks with Tammy")

- Hazard Tracking database
- QA processes such as receipt inspections and nonconformance reports
- Webster's Incredibly Safe Employees (WISE) Team input
- Investigations/fact finding

SST applies a graded approach to the management of issues as described in ISSC-QA-PR-013, *Issues Management Program*, which provides for timely reporting and directs compensatory actions to be taken, when needed. SST designates issues as nonconformances (nonconformities) or opportunities for improvement. Nonconformities require correction and/or corrective action by the responsible manager. Nonconformities that represent significant programmatic breakdowns (i.e., serious effect on safety or operability) are classified as Significant Conditions Adverse to Quality (SCAQs). Opportunities for Improvement (OFIs) are areas that, when addressed, contribute to increased organizational effectiveness or efficiency and performance excellence (continuous improvement). Response to OFIs by the responsible manager is not mandatory, but at minimum, requires a justification for not addressing. External auditors have different definitions for issues and SST responds to issues from external audits, per those definitions.

All issues identified in a nuclear program area are considered nonconformities, conditions adverse to quality (CAQs), require prompt identification, and must be corrected by the responsible manager, as soon as practicable. All nonconformities require correction and are evaluated as potential program or process level issues that require causal analysis and corrective actions beyond correction of the initial nonconformity.

Issues are tracked to closure in ITS. A report of issues and associated open actions is provided to managers each week and reviewed by the Project Manager and QA Manager to ensure that actions are completed. The Management Review team also looks at open issues at the monthly meetings.

6.2 MANAGEMENT REVIEW BOARD

The SST Management Review Board (MRB) provides cross-functional evaluation of program-level issues, identification of causes, development of appropriate actions to project-wide issues and opportunities, and approves important projects prior to kickoff. The MRB also determines when issues will be voluntarily reported to DOE via the Noncompliance Tracking System (NTS). The MRB operates to ISSC-PM-PR-001, *Management Review Board*. The Project Manager chairs the MRB and the QA Manager makes recommendations on when the MRB is needed for issue review.

The MRB meets at least quarterly to review the status of the IMS. The review board agenda will be scheduled to ensure that all requirements are discussed at least annually during a MRB. The MRB will review the results of the measurement plans on a quarterly basis. The MRB will determine at each quarterly review if the IMS is effective, if any

actions are required to improve, identify any additional opportunities for improvement and identify the any need for additional resources.

6.3 TRACKING AND TRENDING

QA evaluates information entered into ITS for possible trends or indications of a programmatic problem. Each quarter, QA personnel pull data from ITS, as well as a number of other sources, to prepare the CAS quarterly update. The CAS update includes data for the reporting quarter, but also includes an evaluation of the previous 12-month period to help in trend identification. Trend analysis may also be conducted by other groups, such as Incidents of Security Concern trending by the S&S group and IT issues tracked in the TrackIt! system.

6.4 OPERATING EXPERIENCE AND LESSONS LEARNED

SST implements an active program to review DOE Lessons Learned and Operating Experience (OPEX) reports to identify both practices and corrective actions that may be applied to SST work to improve performance or prevent a problem (ISSC-QA-PR-009, *Operating Experience Program*). In addition to monitoring the DOE systems (e.g., Lessons Learned database, OPEX bulletins, occurrence reports, and others), SST subscribes to OPEXShare, a DOE contractor developed database that pulls information from a variety of sources, including sources such as Consumer Products Safety Commission, as well as the DOE Lessons Learned database. OPEXShare is cloud-based, easily accessed, and user-friendly, allowing all employees from management to workers to search for information applicable to their work. OPEXShare provides simple feedback mechanisms for users that allow collection of data for tracking and trending.

Lessons Learned are developed and shared using feedback from employee observations, work control program feedback, and issue resolution. SST submits lessons of interest to other DOE facilities through OPEXShare and/or the DOE Lessons Learned database.

7.0 REFERENCES

- DOE O 205.1B, Chg. 3, *Department of Energy Cyber Security Program*
- DOE O 226.1B, *Implementation of the Department of Energy Oversight Policy*
- DOE O 227.1A, *Independent Oversight Program*
- DOE O 414.1D Admin. Chg. 1, *Quality Assurance*
- DOE *Quality Assurance Surveillance Plan*
- PGDP-IT-PO-002, *Cyber Security Policy*
- ISSC-BM-PL-003, *Project Management Plan for the Paducah Infrastructure Services Contract at Paducah, Kentucky*

- ISSC-IT-PL-002, *System Security Plan for the Paducah, Kentucky Project Information Systems*
- ISSC-PM-PL-004, *Key Processes and Measurement Plans*
- ISSC-PM-PR-001, *Management Review Board*
- ISSC-ESH-PL-010, *Integrated Safety Management System Description*
- ISSC-ESH-PL-006, *Environmental Management System*
- ISSC-ESH-PR-013, *ES&H Subcontractor Oversight Program*
- ISSC-QA-PL-001, *Quality Assurance Plan*
- ISSC-QA-PL-002, *Contract Performance Quality Assurance Plan*
- ISSC-QA-PR-007, *Quality Level Determination for Procurement of Items and Services*
- ISSC-QA-PR-009, *Operating Experience Program*
- ISSC-QA-PR-010, *Audits*
- ISSC-QA-PR-011, *Nuclear Program Audits*
- ISSC-QA-PR-012, *Management Assessments*
- ISSC-QA-PR-013, *Issues Management Program*
- ISSC-QA-IN-005, *Supplier Audits*
- ISSC-QA-TD-006, *Qualified Suppliers List*

APPENDIX A:

IMPLEMENTING PROCESSES FOR SWIFT & STALEY TEAM CONTRACTOR ASURANCE SYSTEM

Key Functions	DOE O 226.1B Attachment 1, CRD Requirement	Implementing Processes
PERFORMANCE FEEDBACK		
Assessments		
• Used to collect actionable information associated with performance and risk management. • Using a risk-based approach, selects, executes, and documents assessments to identify deficiencies, weaknesses, and opportunities for improvement for management. • Includes self-assessments, independent assessments, operational awareness, peer-reviews, parent organization assessments, supplier audits, and third-party assessments as appropriate to ensure actionable feedback.	2a: The contractor must establish an assurance system that includes assignment of management responsibilities and accountabilities and provides evidence to assure both the Department of Energy's (DOE) and the contractor's managements that work is being performed safely, securely, and in compliance with all requirements; risks are being identified and managed; and that the systems of control are effective and efficient.	ISSC-PM-PL-002, *Risk Management Plan for the ISC at Paducah* ISSC-ESH-PL-010, *Integrated Safety Management System Description* ISSC-ESH-PL-006, *Environmental Management System* ISSC-QA-PL-004, *Quality Assurance Plan* PGDP-IT-PR-003, *Risk Assessment for Information Systems* ISSC-IT-TD-007, *Risk Assessment for the Paducah National Security Systems* ISSC-PE-PO-001, *Value Engineering Policy*
	2b(1): A method for validating the effectiveness of assurance system processes. Third party audits, peer reviews, independent assessments, and external certification may be used and integrated into the contractor's assurance system to complement, but not replace, internal assurance systems.	ISSC-QA-PR-007, *Quality Level Determination for Procurement of Items and Services* ISSC-QA-PR-008, *Qualification and Certification of Audit Personnel* ISSC-QA-PR-010, *Audits* ISSC-QA-PR-011, *Nuclear Program Audits* ISSC-QA-PR-012, *Management Assessments* ISSC-QA-IN-005, *Supplier Audits* Fiscal Year Integrated Oversight Schedule
	2b(2): Rigorous, risk-informed, and credible self-assessment and feedback and improvement activities. Assessment programs must be risk-informed, formally described and documented, and appropriately cover potentially high consequence activities.	ISSC-QA-PR-007, *Quality Level Determination for Procurement of Items and Services* ISSC-QA-PR-008, *Qualification and Certification of Audit Personnel* ISSC-QA-PR-010, *Audits* ISSC-QA-PR-011, *Nuclear Program Audits* ISSC-QA-PR-012, *Management Assessments* ISSC-QA-IN-005, *Supplier Audits* Fiscal Year Integrated Oversight Schedule
Measures		
• Used to sustain and improve performance relative to defined targets. • Selects organizational outcome measure and performance targets. • Selects leading indicator measures needed to sustain or improve key outcome measure performance. • Includes routine evaluation of performance by management and actions to attain performance	2b(6): Metrics and targets to assess the effectiveness of performance, including benchmarking of key functional areas with other DOE contractors, industry, and research institutions.	Integrated Management System Objectives and associated Key Performance Indicators (KPIs) ISSC-BM-IN-005, *Project Performance Measurement* Quarterly Contractor Assurance System (CAS) Updates (Contract Deliverable 17) ISSC-QA-PL-002, *Contract Performance Quality Assurance Plan*

Key Functions	DOE O 226.1B Attachment 1, CRD Requirement	Implementing Processes
targets.		
PERFORMANCE IMPROVEMENT		
Issue and Corrective Action Management		
• Used to ensure that systems and processes perform as designed. • Translates performance feedback information into issues that are risk-prioritized by management for resolution. • Identifies actions required to resolve priority issues, using causal and other analysis methods. • Addresses extent of condition across the contractor's activities and sub-units for priority issues. • Applies resources to actions and then manages the actions to closure to ensure timely and effective issue resolution.	2b(3): A structured issues management system that is formally described and documented and that: (a) Captures program and performance deficiencies (individually and collectively) in systems that provide for timely reporting, and taking compensatory corrective actions when needed.	ISSC-QA-PL-004, *Quality Assurance Plan* ISSC-PM-PR-001, *Management Review Board* ISSC-RM-PR-003, *Deliverables and Commitment Management Tracking System* ISSC-QA-PR-013, *Issues Management Program* ISSC-QA-PR-001, *Acceptance of Items and Services* Issues Tracking System (ITS)
	2b(3): A structured issues management system that is formally described and documented and that: (b) Contains an issues management process that is capable of categorizing the significance of findings based on risk and priority and other appropriate factors that enables contractor management to ensure that problems are evaluated and corrected on a timely basis. For issues categorized as higher significance findings, contractor management must ensure the following activities are completed and documented: (1) A thorough analysis of the underlying causal factors is completed; (2) Timely corrective actions that will address the cause(s) of the findings and prevent recurrence are identified and implemented; (3) After completion of a corrective action or a set of corrective actions, an effectiveness review is conducted using trained and qualified personnel that can validate the effectiveness of corrective action/plan implementation and results in preventing recurrences; and (4) Documentation of the analysis process and results described in (1) above, and maintenance and tracking to completion of plans and schedules for the corrective actions and effectiveness reviews described in (2) and (3) above in a readily accessible system.	ISSC-QA-PL-004, *Quality Assurance Plan* ISSC-PM-PR-001, *Management Review Board* ISSC-RM-PR-003, *Deliverables and Commitment Management Tracking System* ISSC-QA-PR-013, *Issues Management Program* ISSC-QA-PR-001, *Acceptance of Items and Services* Issues Tracking System (ITS)
Continuous Improvement		
• Used to drive step- or break-through changes in performance. • Analyzes levels and trends in performance feedback information to identify opportunities for risk reduction and performance improvement that are prioritized by	2b(3)(b)(5) Communicates issues and performance trends or analysis results up the contractor management chain to senior management using a graded approach that considers hazards and risks, and provides sufficient technical basis to allow managers to make informed decisions and correct negative performance/compliance trends before they become significant issues.	ISSC-QA-PR-009, *Operating Experience Program* Monthly Project Reports Invoice Performance Reports Quarterly Contractor Assurance System Updates (Contract Deliverable 17) OPEX Share DOE access to Issues Tracking System

Key Functions	DOE O 226.1B Attachment 1, CRD Requirement	Implementing Processes
management. • Collects, screens, and communicates applicable Lessons Learned to management from sources internal and external to the organization. • Shares Lessons Learned with DOE as relevant to other sites. • Uses systematic approaches to improve processes to realize priority opportunities for risk reduction and performance improvement.	2b(4): Timely and appropriate communication to the Contracting Officer, including electronic access of assurance-related information. 2b(5): Continuous feedback and improvement, including worker feedback mechanisms (e.g., employee concerns programs, telephone hotlines, employee suggestions forms, labor organization input), improvements in work planning and hazard identification activities, and lessons learned programs. 2c: The contractor must submit an initial contractor assurance system description to the Contracting Officer for DOE review and approval. That description must clearly define processes, key activities, and accountabilities. An implementation plan that considers and mitigates risks should also be submitted if needed and should encompass all facilities, systems, and organization elements. Once the description is approved, timely notification must be made to the Contracting Officer of significant assurance system changes prior to the changes being made. 2d: To facilitate appropriate oversight, contractor assurance system data must be documented and readily available to DOE. Results of assurance processes must be analyzed, compiled, and reported to DOE as requested by the Contracting Officer (e.g., in support of contractor evaluation or to support review/approval of corrective action plans).	Monthly Closed Issues and Actions Report to DOE (email) Hazard Tracking System ISSC-HR-PR-002, *Employee Concerns* ISSC-ESH-PR-009, Suspension of Work (Safety-Related) ISSC-QA-PR-003, *Event Investigation* ISSC-PM-PR-003, *Work Planning and Control* ISSC-PM-PR-002, *Project Work Process* Labor-Management Meetings (Bi-weekly) Labor-Management Conference (Annual) Talks with Tammy (Monthly cross-functional, cross-level employee meeting with Project Manager)

APPENDIX B:

2019 INTEGRATED AUDIT SCHEDULE

2019 Integrated Audit Schedule

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Performing Org	Observed Org	Topic	Driver	Periodicity (months)	2019 Draft Due Date
ESH	ESH	Respiratory Protection Program	10 CFR 851 App B	36	1/31/2019
ESH	ESH	CAIRS Quarterly (JAN)	DOE O 231.1B Chg 1	12	1/31/2019
QA	O&M	S/CI Inspection of Inventory and Storage Area (JAN)	DOE O 414.1D	12	1/31/2019
QA	QA	Supplier Audit, Annual - Summit Environmental Services	WI-QA-011 R0	12	1/31/2019
QA	QA	Supplier Audit, Triennial - Summit Environmental Services	DOE O 414.1D	36	1/31/2019
IT	IT	Cyber Security Annual Self Assessment - Unclas	DE-EM0003733	12	2/28/2019
REC	REC	Deliverables Program	Management Directed	12	2/28/2019
ESH	O&M	Lockout Tagout	CP3-HS-2010 F Rev.2A	12	2/28/2019
QA	QA	Supplier Audit, Annual - Mirion Technologies, Inc.	WI-QA-011 R0	12	2/28/2019
QA	QA	Contract Fence Assessments Quarterly (MAR)	Management Directed	12	3/28/2019
QA	ESH	ISO 14001 Environmental Management System	Management Directed	12	3/28/2019
ESH	ESH	Lead Protection Program	10 CFR 851 App B	36	3/28/2019
Engr	Engr	Physical Inventory Process	DOE O 580.1 Chg 1	12	3/28/2019
O&M	O&M	Semi Annual O&M Management Self-Assessment (MAR)	10 CFR 830.122	12	3/28/2019
QA	QA	Supplier Audit, Annual - Premier Fire	WI-QA-011 R0	12	3/28/2019
ESH	ESH	CAIRS Quarterly (APR)	DOE O 231.1B Chg 1	12	4/25/2019
QA	QA	Supplier Audit, Annual - PNNL	WI-QA-011 R0	12	4/25/2019
QA	QA	Supplier Audit, Triennial - PNNL	DOE O 414.1D	36	4/25/2019
ESH	ESH	Bloodborne Pathogens Program	10 CFR 851 App B	36	5/30/2019
QA	ESH	DOELAP External Dosimetry	Management Directed	36	5/30/2019
Engr	Engr	Facilities Information Management System	DOE O 430.1B Chg 1	12	5/30/2019
Engr	Engr	Fleet Annual Assessment	48 CFR 52.245-1	12	5/30/2019
O&M	O&M	Periodic Rigging Inspection	10 CFR 851 App B	12	5/30/2019
QA	ESH	RPP 01. Organization and Administration 02. ALARA Program	10 CFR 835.102	36	5/30/2019
QA	ESH	RPP 09. Records	10 CFR 835.102	48	5/30/2019
QA	QA	Supplier Audit, Annual - Energy Solutions	WI-QA-011 R0	12	5/30/2019
QA	ALL	Progress of 2017 DOE ISMS Corrective Actions III	Effectiveness Review	NA	6/27/2019
QA	QA	Contract Fence Assessments Quarterly (JUN)	Management Directed	11	6/27/2019
ESH	O&M	Fire Protection	DOE O 420.1C	36	6/27/2019
QA	IT	Software QA followup	EM-QA-001 R1	NA	6/27/2019

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Performing Org	Observed Org	Topic	Driver	Periodicity (months)	2019 Draft Due Date
QA	QA	Supplier Audit, Annual - Healthworks	WI-QA-011 R0	12	6/27/2019
Bus	Bus	Annual Business Management Self Assessment (JUL)	10 CFR 830.122	12	7/25/2019
HR	HR	Annual Human Resources Management Self Assessment (AUG)	10 CFR 830.122	12	7/25/2019
Engr	Engr	Configuration Management - Construction	DOE STD-1073-2016	36	7/25/2019
ESH	ESH	CAIRS Quarterly (JUL)	DOE O 231.1B Chg 1	12	7/25/2019
Bus	Bus	DOE O 150.1 A, Continuity Programs	DOE O 150.1A	12	7/25/2019
QA	QA	DOE O 414.1D Criterion 05— Performance/Work Processes.	EM-QA-001 R1	36	7/25/2019
QA	O&M	S/CI Inspection of Inventory and Storage Area (JUL)	DOE O 414.1D	12	7/25/2019
QA	QA	Supplier Audit, Annual - Griffin Instruments	WI-QA-011 R0	12	7/25/2019
QA	QA	Supplier Audit, Triennial - Griffin Instruments	DOE O 414.1D	36	7/25/2019
IT	IT	Cyber Security Annual Self Assessment - Classified	DE-EM0003733	12	8/29/2019
QA	QA	DOE O 414.1D Criterion 06— Performance/Design.	EM-QA-001 R1	36	8/29/2019
REC	REC	Environmental Information Center	SST 08.06.05	12	8/29/2019
ESH	ESH	Personal Protective Equipment	10 CFR 851 App B	36	8/29/2019
QA	QA	Supplier Audit, Annual - FLUKE	WI-QA-011 R0	12	8/29/2019
QA	QA	Supplier Audit, Annual - J.A. King calibration and fire services	WI-QA-011 R0	12	8/29/2019
QA	QA	Contract Fence Assessments Quarterly (SEP)	Management Directed	11	9/26/2019
ESH	ESH	EFCOG Safety Conscious Work Environment	Management Directed	12	9/26/2019
REC	REC	Essential Records Annual Self-Assessment	Management Directed	12	9/26/2019
QA	QA	Supplier Audit, Annual - Landauer	WI-QA-011 R0	12	9/26/2019
ESH	ESH	CAIRS Quarterly (OCT)	DOE O 231.1B Chg 1	12	10/31/2019
ESH	ESH	Comprehensive Emergency Management System (OCT)	DOE O 151.1D	12	10/31/2019
QA	QA	Supplier Audit, Annual - General Engineering Laboratories (GEL)	WI-QA-011 R0	12	10/31/2019
QA	QA	Supplier Audit, Triennial - General Engineering Laboratories (GEL)	DOE O 414.1D	36	10/31/2019
ESH	ESH	Dosimetry Staff Qualifications	DOE-STD-1095-2018	12	11/28/2019
QA	ESH	RPP 05. Area Monitoring and Control a. Area Radiation Monitoring	10 CFR 835.102	36	11/28/2019
QA	ESH	RPP 05. Area Monitoring and Control c. Contamination Monitoring and Control	10 CFR 835.102	36	11/28/2019
QA	ESH	RPP 05. Area Monitoring and Control d. Instrument Calibration and Maintenance	10 CFR 835.102	36	11/28/2019

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Performing Org	Observed Org	Topic	Driver	Periodicity (months)	2019 Draft Due Date
QA	QA	Supplier Audit, Annual - ALS	WI-QA-011 R0	12	11/28/2019
QA	REC	Records Management	DOE O 243.1	36	12/26/2019
QA	QA	Supplier Audit, Annual - UT-Battelle (ORNL)	WI-QA-011 R0	12	12/26/2019

Submitted _____ 12/17/2018
J. Tortorelli, QA Specialist

Reviewed _____ 12-17-18
J. Hayes, QA Manager

Approved Tammy Courtney 12/17/18
T. Courtney, Project Manager