

ENTERPRISE-WIDE TECHNICAL & ENGINEERING SUPPORT ALLIANCE



October 2017



Technical, Engineering, and Programmatic Support Capabilities





## ❖ Introduction

The Enterprise-Wide Technical & Engineering Support Alliance (E-TESA-2), unified under the leadership of TechSource, provides the Department of Energy (DOE)/ National Nuclear Security Administration (NNSA) a **total solution** to satisfy strategic sourcing objectives under the DOE/NNSA Blanket Purchase Agreement (BPA). E-TESA (Figure 1) is configured as a Small Business Contractor Team Arrangement (CTA) with nine CTA team members and twenty subcontractors. TechSource selected each company specifically to ensure DOE/NNSA has the maximum support and to demonstrate the confidence in our ability to: 1) provide a team of Key, technical, and analytical support personnel that offer decades of successful experience as well as best-in-class expertise, understanding, and the ability to perform all task areas; 2) reduce performance risk and ensure continuity of service, evidenced in the E-TESA members' support of over 44 percent of the BPA Task Order awards with a strong level of customer satisfaction, and 3) meet or exceed small business utilization goals under the BPA by delivering a balanced team of well-qualified small and large businesses. A summary of the capabilities offered by E-TESA are shown in Figure 2.

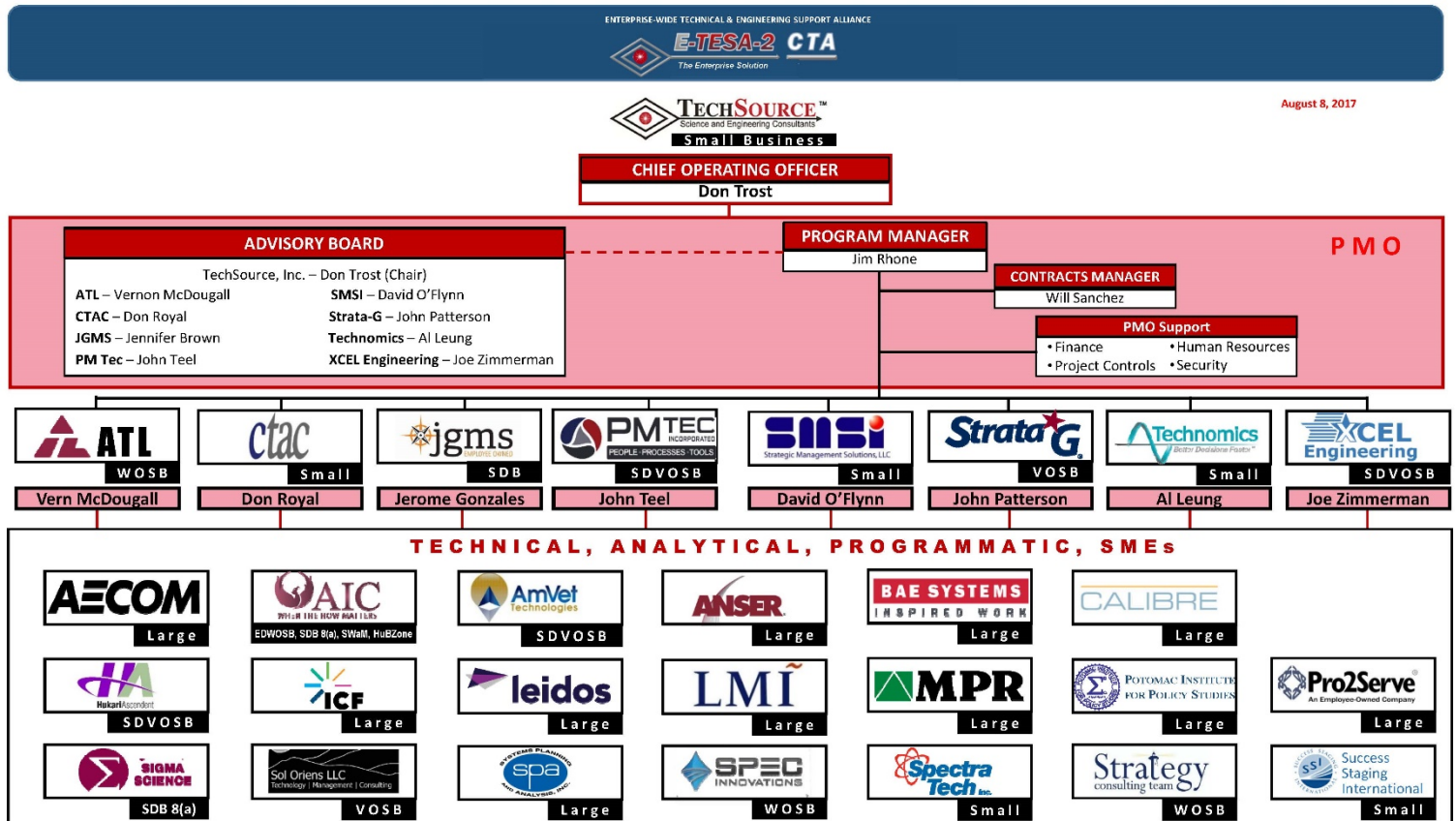


Figure 1. Enterprise-Wide Technical & Engineering Support Alliance CTA



# E-TESA has a broad **SPECTRUM** of capabilities

Figure 2. E-TESA-2 Capabilities Summary

Company		Capabilities	
<b>CTA LEAD</b>		<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Nuclear Engineering and Analysis</li> <li>• Defense Science and Technology</li> <li>• Independent Project Reviews and Cost Estimating</li> <li>• Systems Engineering and Integration</li> <li>• Nuclear and Atomic Sciences</li> </ul>	<ul style="list-style-type: none"> <li>• Particle-accelerator physics and engineering</li> <li>• Nonproliferation and International Security</li> <li>• Material protection, control, and accountability</li> <li>• Business Case Analyses</li> <li>• Advanced Nuclear Fuels</li> </ul>
<b>CTA MEMBERS</b>		<ul style="list-style-type: none"> <li>• Nuclear Forensics</li> <li>• Health Physics and Radiochemistry</li> <li>• Chemical, Biological, Radiological and Nuclear Defense</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency Management</li> <li>• Environmental Cleanup and Waste Management</li> <li>• Industrial Hygiene and Toxicology</li> </ul>
		<ul style="list-style-type: none"> <li>• Systems Security</li> <li>• Vulnerability and Risk Assessment</li> <li>• Cloud Solutions</li> <li>• DevOps Implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Information Management</li> <li>• Digital Services and Web Application Development</li> <li>• API Development and System Integration</li> </ul>
		<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Nuclear Engineering and Analysis</li> <li>• Training</li> <li>• Nuclear Explosives Safety Reviews</li> </ul>	<ul style="list-style-type: none"> <li>• Quality Assurance</li> <li>• NEPA Technical Analysis</li> <li>• Secure Transportation</li> <li>• Long-range Facility Planning</li> </ul>
		<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Earned Value Management System (EVMS) Implementation and Certification Support</li> <li>• Project Controls / Scheduling Services utilizing Primavera P6 and Microsoft Project</li> <li>• Project Management and EVM Training</li> </ul>	<ul style="list-style-type: none"> <li>• Oracle Primavera Software Sales, Implementation, and Oracle-Certified Training Project Management System Related IT Services</li> <li>• Authorization Basis Development</li> <li>• Engineering Services</li> <li>• Environmental Services</li> <li>• Technical Documentation Development and Publication</li> </ul>
		<ul style="list-style-type: none"> <li>• Program Management and Controls Support</li> <li>• Engineering Support</li> <li>• Nuclear Facility Operations and Safety</li> <li>• Safeguards and Security</li> </ul>	<ul style="list-style-type: none"> <li>• IT Services</li> <li>• Demolition and Decommissioning</li> <li>• Performance Assurance and Organizational Improvement</li> <li>• ES&amp;H and Regulatory Compliance</li> </ul>



CTA MEMBERS		<ul style="list-style-type: none"> <li>• <b>Program Management</b> <ul style="list-style-type: none"> <li>– Infrastructure Management</li> <li>– LEAN, Six Sigma, and Process Improvement</li> <li>– Project Controls, Scheduling, Estimating and Risk Management</li> </ul> </li> <li>• <b>Nuclear Engineering Subject Matter Expertise</b> <ul style="list-style-type: none"> <li>– Operational Readiness/Root Cause Analysis</li> <li>– Quality Assurance and Safety Management</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Emergency Operations Support</b></li> <li>• <b>Nuclear Non-proliferation</b></li> <li>• <b>Environmental Management and Sustainability</b> <ul style="list-style-type: none"> <li>– Decontamination and Decommissioning</li> <li>– Environmental Compliance and Regulatory Support</li> </ul> </li> <li>• <b>Hazardous, Nuclear, and Radiological Materials Management</b></li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Program and Project Management</b></li> <li>• <b>Independent Project Reviews and Cost Estimating</b></li> <li>• <b>Analysis of Alternatives</b></li> <li>• <b>Training</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Budget Formulation</b></li> <li>• <b>Systems Engineering and Integration</b></li> <li>• <b>Business Case Analyses</b></li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Environmental Engineering and Compliance</b></li> <li>• <b>Nuclear Engineering and Analysis</b></li> <li>• <b>NEPA Technical Analysis</b></li> <li>• <b>Program and Project Management</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Nuclear Reactor Safety</b></li> <li>• <b>TSCA (Toxic Substances Control Act) Support</b></li> <li>• <b>Engineering Design and Analysis</b></li> </ul>
SUBCONTRACTORS		<ul style="list-style-type: none"> <li>• <b>Program and Project Management</b></li> <li>• <b>Nuclear Facility Operations and Asset Management</b></li> <li>• <b>Nuclear Engineering and Analysis</b></li> <li>• <b>Nuclear Security and Nonproliferation Services</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Nuclear Weapon Surety</b></li> <li>• <b>Industrial Hygiene and Toxicology Support</b></li> <li>• <b>Emergency Management and Operations</b></li> <li>• <b>Aviation Operations</b></li> <li>• <b>Training</b></li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Program and Project Management</b></li> <li>• <b>Nuclear Engineering and Analysis</b></li> <li>• <b>Emergency Management and Operations</b></li> <li>• <b>Nuclear Nonproliferation</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Communication Management</b></li> <li>• <b>Information and Technology Management</b></li> <li>• <b>Training</b></li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Software Engineering</b></li> <li>• <b>Cyber Security and Cyber Forensics</b></li> <li>• <b>NQA-1-level Software Development</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Software Quality Management</b></li> <li>• <b>Program Management</b></li> <li>• <b>Records Management</b></li> <li>• <b>Software Quality Assurance</b></li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Nuclear Policy and Strategic Deterrence</b></li> <li>• <b>Arms Control and Treaty Compliance</b></li> <li>• <b>Nuclear Surety</b></li> <li>• <b>Countering Weapons of Mass Destruction</b></li> <li>• <b>Risk Assessment</b></li> <li>• <b>Business Case Analysis/Economic Analysis</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Capabilities Based Analysis</b></li> <li>• <b>Acquisition Analysis</b></li> <li>• <b>Analysis of Alternatives</b></li> <li>• <b>Workforce Analysis</b></li> <li>• <b>Science and Technology Development</b></li> <li>• <b>Test and Evaluation</b></li> </ul>



SUBCONTRACTORS

 <p><b>BAE SYSTEMS</b> INSPIRED WORK</p>	<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Model Based System Engineering (MBSE)</li> <li>• Nuclear Weapon Surety</li> <li>• Logistics Management</li> <li>• System Engineering and Analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Program Protection</li> <li>• Cybersecurity</li> <li>• Risk, Issue and Opportunity Management</li> <li>• Configuration and Data Management</li> </ul>
	<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Logistics Management</li> <li>• Financial and Cost Management</li> <li>• Strategic Planning</li> <li>• Training</li> </ul>	<ul style="list-style-type: none"> <li>• Environment, Safety, and Health, including NEPA</li> <li>• Facilities and Capital Asset Management, including Land Management</li> </ul>
	<ul style="list-style-type: none"> <li>• Safety Management Programs Development, Implementation and Assessment</li> <li>• Nuclear and Criticality Safety</li> <li>• Environment, Safety and Health</li> <li>• Integrated Safety Management</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory Compliance</li> <li>• Engineering</li> <li>• Quality Assurance</li> <li>• Conduct of Operations</li> <li>• Readiness Assessment</li> <li>• CBRNE Subject Matter Experts</li> </ul>
	<ul style="list-style-type: none"> <li>• Critical Infrastructure Security and Resilience</li> <li>• Communications</li> <li>• Cybersecurity</li> <li>• Data Science and Analytics</li> <li>• Digital and Mobile Technologies</li> <li>• Emergency Operations</li> </ul>	<ul style="list-style-type: none"> <li>• Energy Analysis</li> <li>• Environmental Management and Sustainability</li> <li>• Human Capital Management</li> <li>• Policy and Regulatory Development</li> <li>• Program and Project Management</li> <li>• Training</li> </ul>
	<ul style="list-style-type: none"> <li>• Cyber Security</li> <li>• Data Analytics</li> <li>• Earned Value Management</li> <li>• Emergency Management</li> <li>• Intelligence Services</li> <li>• Materials Science</li> <li>• Modeling and Simulation</li> <li>• Nuclear Engineering and Analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Operations and Logistics</li> <li>• Program Budgeting and Execution</li> <li>• Program Management</li> <li>• Security Management</li> <li>• Strategic Planning/Communications</li> <li>• Systems Engineering and Integration</li> <li>• Training</li> </ul>
	<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Information and Technology Management</li> <li>• Logistics Management</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Management</li> <li>• Earned Value Management</li> <li>• Facilities and Capital Assets Management</li> </ul>
	<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Technical Program Planning</li> <li>• Owner's Engineering</li> <li>• Acquisition Planning</li> <li>• Integrated Cost, Schedule, Risk Analyses</li> <li>• Environmental, Safety and Health Assessments</li> <li>• Nuclear Nonproliferation</li> <li>• System and Component Design, Analysis and Testing</li> <li>• Environmental, Safety and Health Assessments</li> </ul>	<ul style="list-style-type: none"> <li>• Nuclear Nonproliferation</li> <li>• System and Component Design, Analysis and Testing</li> <li>• Reliability, Availability and Maintainability Engineering</li> <li>• Advanced Power Systems Design, Analysis and Testing</li> <li>• New Nuclear Reactor Design, including Small Modular Reactors</li> <li>• System/Facility Modernization</li> <li>• HEU to LEU Reactor Fuel Conversions</li> </ul>
 <p><b>POTOMAC INSTITUTE FOR POLICY STUDIES</b></p>	<ul style="list-style-type: none"> <li>• Strategic Planning</li> <li>• Policy and Program Development</li> <li>• Commercial Technology Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Research Studies and Analysis</li> <li>• Communications and Outreach</li> <li>• Operational Concept Application</li> <li>• S&amp;T trends and Forecasting</li> </ul>



SUBCONTRACTORS

 <p><b>Pro2Serve</b><sup>®</sup> An Employee-Owned Company</p>	<ul style="list-style-type: none"> <li>• Program Management</li> <li>• Nuclear Engineering and Analysis</li> <li>• Training</li> <li>• Security Management</li> <li>• Nuclear Energy and Environmental Remediation</li> <li>• Infrastructure Engineering and Management</li> </ul>	<ul style="list-style-type: none"> <li>• Nuclear Nonproliferation</li> <li>• Nuclear Weapons Program Planning</li> <li>• Independent Cost Estimating</li> <li>• Special Nuclear Material Monitoring and Assessments</li> <li>• Life-cycle Security Upgrades</li> </ul>
 <p><b>SIGMA SCIENCE</b></p>	<ul style="list-style-type: none"> <li>• Nuclear Safety</li> <li>• Nuclear Security</li> <li>• IT / Cyber Security</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental Safety and Health</li> <li>• Mission Assurance</li> </ul>
 <p>Sol Oriens LLC</p>	<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Information and Technology Management</li> <li>• Logistics Management</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Management</li> <li>• Earned Value Management</li> <li>• Facilities and Capital Assets Management</li> </ul>
 <p>SYSTEMS PLANNING <b>spa</b> AND ANALYSIS, INC.</p>	<ul style="list-style-type: none"> <li>• Strategic Planning and Program Management</li> <li>• Nuclear Deterrence, Safety, and Security</li> <li>• Security Risk Management</li> <li>• Security System Operations</li> </ul>	<ul style="list-style-type: none"> <li>• Modeling and Simulation</li> <li>• Organizational Culture / Leadership training</li> <li>• System Engineering and Integration</li> </ul>
 <p><b>SPEC INNOVATIONS</b></p>	<ul style="list-style-type: none"> <li>• Program and Project Management</li> <li>• Systems Engineering and Architecture</li> <li>• Requirements Analysis and Managements</li> </ul>	<ul style="list-style-type: none"> <li>• Modeling and Simulation</li> <li>• Test and Evaluation</li> <li>• Enterprise Architecture</li> <li>• Business Process Engineering</li> <li>• Training</li> </ul>
 <p><b>Spectra Tech Inc.</b></p>	<ul style="list-style-type: none"> <li>• Nuclear                         <ul style="list-style-type: none"> <li>– Nuclear safety, facility safety and operations</li> <li>– Criticality safety</li> <li>– Radiation protection</li> <li>– Materials management</li> <li>– Quality Assurance</li> </ul> </li> <li>• Environmental                         <ul style="list-style-type: none"> <li>– Compliance</li> <li>– Assessments and investigations</li> <li>– Remediation</li> <li>– Waste management</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Engineering                         <ul style="list-style-type: none"> <li>– Design and construction</li> <li>– Construction management</li> <li>– Quality Assurance</li> <li>– Building commissioning</li> <li>– LEED evaluations and support</li> </ul> </li> <li>• Operations maintenance</li> </ul>
 <p><b>Strategy consulting team</b></p>	<ul style="list-style-type: none"> <li>• Strategy development and execution</li> <li>• Human capital strategic planning and workforce design and planning</li> <li>• Organizational analysis and improvement</li> <li>• Change management and engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Data analysis and visualization</li> <li>• Project and program management</li> <li>• Executive coaching, leadership development, and group facilitation</li> </ul>
 <p><b>Success Staging International</b></p>	<ul style="list-style-type: none"> <li>• Program and Project Management: Execution, Training</li> <li>• Systems Engineering: F&amp;OR's, Alternative Studies, Training</li> <li>• Line Item and Recap Projects: Establish Business Case, Reviews</li> </ul>	<ul style="list-style-type: none"> <li>• Enterprise Risk Management: Establishment, Evaluation</li> <li>• Enterprise Operating System: Establishment, Evaluation</li> </ul>



## ❖ E-TESA Team Members Introductions

### ❖ CTA Lead



Founded in 1997, TechSource, a technical and engineering consultancy small business, has evolved into an organization that successfully supports DOE, NNSA, and other governmental clients from top-level

policy to the test bench. We are trusted, independent advisors to the highest levels of government and are sought after to provide on-going subject matter technical expertise in areas covering accelerator physics, nuclear science, management and organization analysis for high-technology organizations, and most recently, application of systems engineering to DOE, NNSA, and national laboratory programs and projects.

TechSource possesses a unique and unmatched knowledge of the weapons complex and has a comprehensive, hands-on understanding of NNSA enterprise transformation activities. We have captured, and are fortunate to have access to, technical and operational leadership from across the entire nuclear weapons enterprise. Specifically, TechSource provided key members to the Secretary of Energy Advisory Board (SEAB) task force that initiated the nuclear weapons complex transformation effort. TechSource provided first-hand support and leadership in development of the follow-up NNSA studies and planning, and continues into the execution of the transformation. Our insight and wisdom, garnered over decades, provides an invaluable context for developing and executing long-term planning for any NNSA site or National Lab. Our past and current involvement with DOE and NNSA labs, plants, and sites also provides us a unique insight into the organization situation at the operational level. Our multi-lab involvement gives us a grounded, situational awareness that is not addressed by the blue-ribbon panel reviews; yet, vital to achieving meaningful performance changes. Most of our people are from the national lab environment so they are fully aware of the expected organization culture and the associated policies, processes, and procedures typical to national lab operation.

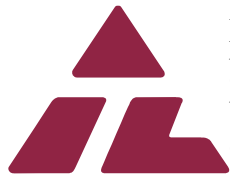
TechSource has focus on the capture of nuclear science and engineering expertise exiting the nuclear complex in order to retain these national assets for future needs and to transfer decades of hands-on knowledge to the next generation of experts. Today, TechSource has an enviable talent pool of over 800 subject matter experts (SMEs) who possess cradle to grave knowledge of the weapons complex research and operations. At no time are we seeking to be a “body shop”. We engage with the client upfront to gain an understanding of their needs and customize our support to fit each engagement to a specific “Point of Interest”. We provide full-time, part-time, and on-call subject matter expertise on an as needed basis – we work hand-in hand with our clients to solve the issues they are facing and exit when the solution is found.

Our clients and competition often refer to us as “national lab-lite”. We possess and share decades of knowledge and experience of the weapons complex and related technical capabilities without the costly infrastructure but with greater flexibility. Unlike most small businesses, and most large businesses for that matter, we do not typically provide staff augmentation support – we are not a body shop. Additionally, TechSource is most frequently involved in the “program” side of the NNSA headquarters and national labs vice the support or infrastructure side. This includes involvement in key organizations from the Nuclear Weapons Counsel to SAGSAT to NNSA NA-10 and into laboratory programs. Simply put, we provide highly flexible and responsive experts that address most technical areas within DOE/NNSA mission space. We are considered by those facing the most complex challenges today as the go-to for technical experts.





## ❖ CTA Members



ATL is a woman-owned business that focuses primarily on protection of humans from physical, chemical, biological, and radiological hazards (including occupational, environmental, and emergency-related exposures). ATL is dedicated to delivering best-value services and solutions based on innovative applications of science, engineering, regulatory requirements, policy, management, and technology. We specialize in implementing and executing technology in the areas of nuclear forensics; health physics and radiochemistry; chemical, biological, radiological and nuclear defense; emergency management; environmental cleanup and waste management; and industrial hygiene and toxicology. ATL has provided such technical support to a wide range of federal agencies, national laboratories, and other DOE sites for more than 20 years. Current work includes but is not limited to radiation protection, dose calculations, and shielding design for the National Institute for Standards and Technology in Maryland; radiation data validation at the Maxey Flats site in Kentucky; laboratory services and analytical support at the Hanford 222-S Laboratory in Washington State; and radiological staff augmentation at Argonne National Laboratory in Illinois.



CTAC is a privately-owned **GSA-listed small business under GS-10F-0159J and GS-35F-256CA**, specializing in Cloud solutions and modernization with serverless architecture; DevOps implementation through continuous integration and delivery as well as containerization; Cyber Security by developing FedRAMP System Security Packages and compliance for shared SecOps and NetOps services and platforms; and Agile development focused on utilizing microservices. CTAC currently supports DOE, NNSA, and various other federal agencies. CTAC's support to DOE/NNSA includes work **supporting NA-70** in developing the DNS process to independently verify the results of Vulnerability Assessments, developing and implementing the first DNS strategic planning process, the Safeguards and Security (S&S) Management Plan and the S&S Technical Qualifications Program; designing the human capital management and human reliability and personnel security programs; designing and implementing a workflow and business management processes, and developing the Evaluation and Performance Assurance Program; DOE's **Office of Environmental Management (EM)** providing expertise in training design, development, and implementation as well as conducting workforce analysis and planning, and DOE's **Office of Engineering and Construction Management (OECM)** providing expertise in support of the independent review teams.



JG Management Systems, Inc. (JGMS) is a **Small and Disadvantaged Business firm** with a successful history of supporting DOE, its national laboratories, and other federal agencies. JGMS supports numerous DOE/NNSA clients with technical and management needs, including assembling an integrated team to optimize functional areas such as budget, financial, legal, safety, and contracting and to assist them with the planning, programming, budgeting, and acquisition of capital assets. Additional areas where JGMS provides support to NNSA include: Senior level consultation for nuclear explosives safety reviews to the **Nuclear Explosives Safety Division (NA-12)** at nuclear facilities at **Pantex, NNSS, LANL, LLNL, and Sandia**; senior-level support for the development and implementation of NNSA **Office of Secure Transportation's (OST's)** long-range facility planning; and assessments of contractor performance and oversight activities for environmental projects for **LASO's Environmental Projects Office (EPO)**. JGMS provides project management, technical support, NEPA technical analysis, and quality assurance support.



PM tec, Inc. (PM tec) is a **Service-Disabled Veteran-Owned Small Business (SDVOSB)** with more than 25 years of experience serving as a leading solution provider of program/project management, project controls, EVMS certification, project management and project management software training, and software implementation support throughout federal government agencies, state and local government, and commercial entities. PM tec's staff provides technical support to our clients in all facets of project and program management from strategic planning and decision making to the design and implementation of project controls systems and execution. PM tec's EVMS approaches are compliant with the ANSI-748 EVMS standard, DOE 413.3B, and DOD/DCMA EVM Implementation Guide requirements. PM tec is a Registered Education Provider with the Project Management Institute (PMI) and conducts approximately 50 public and private project management-related classes each year. As an Oracle Gold Partner, PM tec is authorized to sell, implement, and support all Oracle Primavera software products. PM tec provides Oracle Primavera certified software, training and project control solutions tailored to our customer's needs and business requirements. Additional areas where PM tec supports our clients includes technical support in the areas of engineering services; environmental management, compliance, and document development; authorization basis analysis and development; readiness review preparation and support; organizational development and portfolio management; and documentation support, graphic design, and publication. PM tec has provided technical services throughout DOE/NNSA including LANL, SNL, NNS, SNL, BNL, NREL, FermiLab, SLAC, LLNL, and LBL.



**Strategic Management Solutions, LLC (SMSI)**, is a **Small Business** based in Albuquerque NM, founded in 1999 with **over 18 years of successful experience** within the DOE/NNSA Enterprise, with a professional staff of over 70 who provide expert support services to **DOE, NNSA, National Laboratories**, and other federal clients, including the **U.S. Army Corps of Engineers** and **Department of Homeland Security**. SMSI has personnel (**many holding active DOE clearances**) with extensive engineering, technical, environmental, management, nuclear facility startup and operations experience in nuclear and non-nuclear settings. Experience includes oversight support to: capital project planning, engineering, project controls, project/program management, and EVMS support on the B61-12-LEP at Los Alamos National Laboratory, Lawrence Livermore National Laboratory; project controls and project management at the Nevada National Security Site; engineering, operations, and technical support services to the DOE's Portsmouth Paducah Project Office (PPPO); planning and project management for DOE EM at Stanford Linear Accelerator and Lawrence Berkeley National Laboratory; safeguards and security consulting for DOE and NNSA; as an integrated M&O team member at Sandia National Laboratories; and other support throughout the DOE/NNSA Enterprise. SMSI has an outstanding reputation for client-focused performance and helping projects develop realistic baselined and get back on track if they experience difficulties.



Strata-G, LLC is an award-winning **Veteran-Owned Small Business (VOSB)** that has been successful in providing high, quality technical, engineering, and subject matter expertise to support the DOE and NNSA missions across the complex for over 15 years. Strata-G has been supporting NNSA under the *Technical, Engineering, Programmatic Support Services (TEPS)* BPA since 2012. This experience has given us an in-depth understanding of the TEPS contracting vehicle, strategic sourcing processes, and NNSA mission activities across the DOE Complex. Strata-G is also a current DOE prime contractor with a solid understanding of the requirements of working within the highly-regulated national defense, nuclear and radiological, and environmental management programs. Strata-G understands the high level of safety and quality application that is necessary to support the DOE/NNSA. This year, Strata-G achieved a cumulative milestone of **2 million hours of consecutive safety performance** – without a single loss-time accident. Strata-G also has an established Quality Program that aligns with the elements of NQA-1, ISO9001, and 10 CFR 830 Part A. We are an active member of the **Tennessee Center for Performance Excellence** and Strata-G was recently awarded the **Level 2 Quality Commitment Award in 2016**. This award is presented to organizations that demonstrate serious commitment to, and implementation of, performance and quality improvement principles.

- VOSB
- Prime Contracts with DOE-EM and NE
- TEPS CTA Member since 2012
- Over 2M Safe Hours
- Tennessee Center for Quality/Performance Excellence 2016 Commitment Award



Strata-G’s experience within the scope of this BPA includes providing program management, nuclear engineering subject matter expertise, emergency operations, nuclear nonproliferation, and environmental management and sustainability support to the NNSA Mission Offices as well as the DOE Office of Environmental Management. Strata-G personnel currently support the integrated acquisition and project management strategy between NNSA and the U.S. Army Corps of Engineers (USACE) for the design and construction of Uranium Processing Facility (UPF) in Oak Ridge, TN. Strata-G currently provides project management support to conduct technical reviews, assessments, and cross-department policy checks to verify readiness of quality assurance and integrated safety management processes. **Exceptional CPARs.**

**Subject Matter Expertise**

- Program Management
- Nuclear Engineering
- Emergency Operations
- Nuclear Nonproliferation
- Environmental Management and Sustainability

Strata-G also supported NA-20, Deputy Administrator for Defense Nuclear Nonproliferation to develop and implement policy and technical solutions to eliminate proliferation-sensitive materials and limit or prevent the spread of materials, technology, and expertise related to nuclear and radiological weapons and programs around the world.



Technomics is an employee-owned **small-business** with over 30 years' experience helping their clients make better decisions faster. They offer a staff of multi-disciplined, quantitatively-oriented decision analysts who deliver a variety of analytics-based service offerings that meet varied needs. Excellence in cost estimating and cost analysis forms the center of their service offerings. Technomics provides rigorous analytics-based services to help clients assess complex issues and make informed decisions. Their work products provide honest, insightful answers and actionable recommendations supported by defensible evidence and rationale. Technomics currently provides cost estimating, cost analysis, cost policy support, analysis of alternatives, budget formulation and training support to Office of **Cost Policy and Analysis (NA-143)** and the **Office of Cost Estimating and Program Evaluation (CEPE, NA 1.3)**.



XCEL Engineering, Inc., (XCEL), is a **certified service disabled, veteran-owned small business** that has been providing technical environmental and engineering support to Department of Energy contractors and Department of Defense Agencies for over 14 years.

Since their inception, XCEL has successfully supported a number of **DOE/NNSA** contractors with their technical, management, and engineering expertise. Prior to becoming a **DOE protégé** at Oak Ridge National Laboratory (ORNL) in 2008, XCEL was recognized as the **Service Disabled Veteran Owned Small Business of the Year in 2007** by ORNL's operating contractor, UT-Battelle.

XCEL's continuing experience at **DOE National Laboratories** has included providing project management, environmental compliance, waste management, engineering, and technical staff augmentation support. This experience includes providing **project engineering support** in the implementation and development of a variety of operational processes and tools, including work plans, operating procedures, job task analyses, and assessments; providing **engineering support** for D&D projects and Liquid and Gaseous Waste Operations; **providing roll-out training**, presentations, and materials, user support, **project management support** for Lab Directed Research Projects and SEED Money Projects, and supporting SQA testing and documentation requirements; providing **nuclear safety support** for the Russian Plutonium Disposition Program; providing **civil and mechanical engineering support**, including design and construction evaluations, for ORNL's Pressure Safety Program and DOT's Pipeline Safety Program; providing **mechanical engineering support** preparing engineering design for replacement and upgrades of non-reactor facility structures, systems, and components; providing **electrical engineering support** in the instrumentation and control, troubleshooting, repair, design, and customization of high power, high voltage power supply systems for high power microwave generators and high current, low voltage magnet power supplies; developing and evaluating materials and processes for making precursor fibers in support of the Carbon Fiber program at ORNL; **database management support, document management**, phone coverage, scheduling and organizing meetings/conferences, and assisting with visitors; providing **project management support** for Advanced Reactor Evaluations in the preparation of revisions to Sponsor requirements and guidance documents to address advanced **nuclear reactor designs**, supporting the examination of irradiated fuel and identifying and removing fuel examination waste from ORNL's Irradiated Fuels Examination Laboratory; and providing **process design support** of irradiation capsules and design support of experimental test facilities.

In addition, XCEL has been providing environmental management support to DoD agencies, such as Corps of Engineers, for more over 14 years. It's support has included, among many areas, **Regulatory Compliance**, Permitting, and Assessments; **NEPA, CAA, RCRA** Analysis and Regulatory Compliance Reviews; Human Health **Risk Assessment**, Sampling, Monitoring, Air Dispersion Modeling; **Site Investigations and Assessments**, Planning, Design and Construction-Phase Services under CERCLA, RCRA and/or other Applicable State and Federal Regulations; **Environmental Modeling**, Groundwater Monitoring, and Administrative File Record; and **Subsurface Investigations** in Area of Former Underground Storage Tanks & Well Abandonment.



## ❖ CTA Subcontractors

### AECOM

AECOM designs, builds, finances and operates infrastructure assets for governments, businesses and organizations in more than 150 countries. A Fortune 500 firm, AECOM works with governments around the world, supporting programs of critical national importance in the areas of defense, security and intelligence; energy and environmental clean-up; infrastructure and international development. AECOM, with nearly 90,000 employees serving locations worldwide, provides the DoD and DOE nuclear weapons enterprise with outstanding program management, engineering, surety, safety, security, training, inspections, and incident response expertise. The company's in-depth support, dating to the Manhattan Project, helps ensure a safe, reliable and effective national strategic nuclear deterrent. AECOM brings an extensive array of technical, engineering, operations management and support experiences and services to the full DOE/NNSA mission and supporting facilities. AECOM has a broad range of proven capabilities needed to execute missions and manage and operate complete programs and facilities for DOE/NNSA. As a member of the operational teams at the Idaho National Laboratory, LLNL, and other national security laboratories, AECOM has a strong foundation in laboratory services and programs associated with NNSA national security missions and programs. AECOM is also a long-time provider of program management, technical support, and engineering services to the DOE/NNSA Office of Defense Programs under the current Technical and Engineering Support Services BPA, namely in **WDACS/Use Control; nuclear weapons surveillance** support through the **Stockpile Stewardship Program**; analytical and project management support to the **Nuclear Weapons Council, Nuclear Weapons Council Standing and Safety Committee**, and related subordinate technical committees.



Applied Integrity Consulting, LLC (AIC) is an Economically Disadvantaged Woman Owned Small Business (**EDWOSB**), **certified 8(a) Small Disadvantaged Business (SDB)**, and certified Historically Underutilized Business Zone (**HUBZone**) with successful past performance supporting the joint Intelligence Community (IC) and Department of Defense (DoD) communities. AIC provides program/project management, systems engineering, and technical administrative support across a broad range of technical services and organizations such as the Defense Threat Reduction Agency (DTRA) Office of Nuclear Technology (J9NT), Department of Homeland Security (DHS) Science and Technology (S&T), U.S. Cyber Command (USCYBERCOM) Capabilities and Development Group (CDG/J9), and the National Reconnaissance Office (NRO) enterprise implementation of Commercial Cloud Services (C2S), security, and business process engineering for human resources, finance, security, and other mission activities. AIC possesses a Top Secret (TS) Facilities Clearance (TS FCL) and employs staff with TS Sensitive Compartmented Information (SCI) eligibility and successfully adjudicated polygraphs.



AmVet Technologies is a **service disabled veteran-owned small business (SDVOSB)** concentrating on providing high-quality program management, IT and security, and records management support to the federal government. The company is **certified to provide NQA-1-level software development**. Additionally, they are experienced in security functions providing expert support in not only **cyber security** but also the specialized area of **cyber forensics**. Founded in 2006, the firm has provided expert-level services to the **DOE Office of the CIO, LANL, and the West Valley Project**. They support DOE in providing expertise in planning and coordination of the overall DOE approach to managing their cellular communication spectrum. AmVet is the only company listed on the LANL Institutional Evaluated Supplier List (IESL) as a qualified supplier of Software Engineering, Software Quality Management, Software Quality Assurance Products, and Software Quality Assurance Services. The qualification assures their customers of AmVet's capability, history, and quality in compliance with applicable requirements such as 10 CFR 830.122, DOE Order 414.1C, NQA-1.



ANSER is a public service research institute established in 1958 as a Federal Contract Research Corporation to strengthen and secure our National interests. Today, we continue that legacy as a 501(c)(3) Not for Profit corporation providing objective studies and analyses to the national security, homeland security, and public policy communities using a diverse set of capabilities that include: Acquisition Analysis, Analysis of Alternatives, Workforce Analysis, Performance Measurement, Policy Formulation and Risk Management.

ANSER performs work solely for U.S. government entities. We have no shareholders or other external influences shaping our analysis. Our work is unbiased, in both structure and intent and we have decades of experience in nuclear policy and nuclear surety, strategic deterrence, arms control and treaty compliance. A key example of this capability is found in our support of the U.S. Air Force Assistant Chief of Staff for Strategic Deterrence and Nuclear Integration (HQ USAF/A10). ANSER's senior analysts provide technical and programmatic analyses of nuclear weapons and systems plans, operations, sustainment, and requirements. They provide analytic support for the missions of DoD and National Nuclear Security Administration (NNSA) nuclear weapons organizations with emphasis on the joint DoD and NNSA NWC and NWCSSC and other interagency coordination bodies.

ANSER mirrors this level of expertise across its body of work, and it is underpinned by expertise in program management, financial management, budget development and execution and risk management. Our base of knowledge provides a capability multiplier for our customers and their programs. Our analysts provide steady support and consistent enhancements that help programs evolve for maximum effectiveness. ANSER looks over the horizon and anticipates emerging requirements, putting our customers in the best position to mitigate problems and take advantage of opportunities, be they found in budgets, policy or advances in science and technology. We are driven by service, not profits and our purpose is simple: we inform the decisions that shape the nation's future.



BAE Systems is a global defense, aerospace, and security company with over 83,000 employees worldwide. As a leader in science and technology, BAE Systems builds on our strengths as a global provider of defense and security products, as well as, support services to meet the changing needs of our customers. For more than 60 years, BAE Systems has provided direct support to both the U.S. Navy (USN) and U.S. Air Force (USAF) on **two thirds of the nation's Nuclear TRIAD** and almost 90 percent of the warheads deployed on Submarine Launch Ballistic Missiles (SLBM) and Intercontinental Ballistic Missiles (ICBM) – **both are unmatched in industry**. BAE Systems is the **Integration Support Contractor (ISC)** executing the requirements of the Air Force Strategic Programs (AFSP) in support as the Trusted Agent for the USAF Minuteman III (MMIII) ICBM Directorate Lead System Integrator (LSI), Ground Based Strategic Deterrent (GBSD) and the Navy's Trident D5 SLBM. BAE Systems works to ensure these critical nuclear weapon systems remain operational throughout their lifecycle via systems engineering, integration, planning, analysis, configuration management, logistics, and surety (security, safety and reliability factors). BAE Systems' experience in applying each sectors' respective acquisition, development and production processes, has **resulted in cost effective approaches to resolving complex technical and programmatic issues**. BAE Systems brings a vast array of knowledge and experience within the arena of program management and integration to support and exceed all the requirements of Nuclear Command, Control, and Communications (NC3). BAE Systems utilizes a rigid management approach to **ensure flawless execution and best value for the government**.



## CALIBRE

CALIBRE Systems, Inc. (CALIBRE), headquartered in Alexandria, Virginia, is an employee-owned management consulting and information technology solutions company. Founded in 1989, CALIBRE has evolved into the preferred, trusted advisor to executive-

level decision makers serving clients in the public and private sectors – defense, federal civil, and commercial. CALIBRE’s service offerings include program and project management; logistics management; financial and cost management; strategic planning; training; and Environment, Safety, and Health, including NEPA compliance; Facilities and Capital Asset Management, including land management and BUILDER™ Sustainment Management System support; cyber security programs; information assurance; and policy review.

CALIBRE’s clients have rewarded us with contract renewal rates exceeding the industry average. This is supported by independent client satisfaction surveys over several years, in which 100% of the clients surveyed stated that they would use us again and recommend us to others.

CALIBRE’s Alexandria, Virginia office holds a Top Secret facility clearance. We maintain a large multi-purpose area built and maintained to Sensitive Compartmented Information Facility (SCIF) and Special Access Program Facility (SAPF) standards under Intelligence Community Doctrine (ICD) 705.



**HukariAscendent, Inc. is a Certified Service Disabled Veteran Owned Small Business (SDVOSB)** that has been supporting DOE/NNSA nuclear facility operations and cleanup/restoration projects since 1999 *providing Award Winning – Professional and Technical support services, including Subject Matter Experts (SME) resources.* Headquartered in Wheat Ridge, Colorado, **HukariAscendent’s** Performance Excellence is demonstrated by repeat business with

exceptional growth, with expert personnel available nationwide and abroad through our network of contacts in the DOE Complex and the commercial nuclear power industry.

**HukariAscendent** brings the unique *benefits of a small support services organization* (nimble responsiveness and cost effectiveness) *with the advantages of a major corporation* (reputable corporate heritage, quality resources, state-of-the-art business systems, and uncompromising corporate support). This combination means significant opportunities for additional savings in organizational interfaces, performance delivery and bottom-line cost. **HukariAscendent** holds an *active FOCI and Top-Secret security clearances.*

**HukariAscendent** is particularly known for its exceptional strength in supporting large-scale, complex projects involving: *Nuclear/Criticality Safety; Regulatory Compliance; Safety Analysis; Explosives/Nuclear Explosive Safety; Nuclear Facility Licensing, Startup, and Operations; NQA-I; Conduct of Operations; Readiness Assessment; Engineering and Maintenance; Safety Management Programs; Design Engineering (civil/structural, electrical, mechanical, HVAC, process, systems, etc.); Nuclear Material Handling, Processing, and Manufacturing; Hazardous Material Processing and Packaging; Environmental Waste Management and Compliance; Nuclear Facility D&D; and Weapons Program support services.*



ICF is a management, technology, and policy consulting firm with more than 5,000 employees worldwide, and we support markets and provide services directly relevant to DOE and NNSA mission and goals. We have supported DOE Offices, Agencies, and National Laboratories for four decades, and bring directly relevant experience from other clients such as the Defense Critical Infrastructure Program, the FEMA Radiological Emergency Preparedness Program, the Army Research Laboratories Cybersecurity

Program, and others. Since 1969, government and commercial clients have worked with ICF to overcome their toughest challenges on issues that matter profoundly to their success. ICF's Technical, Engineering, and Programmatic support capabilities for this program include:

**Communications.** ICF experts compose integrated campaigns that get noticed amidst the media clutter and deliver results that matter for customer, stakeholder, and employee communications.

**Critical Infrastructure Security and Resilience.** ICF enables clients to manage risks to improve the security and resilience of energy supplies, cyber systems, and other critical infrastructure.

**Cybersecurity.** ICF is trusted by clients to provide the full range of cybersecurity services and solutions and protect evolving IT infrastructures in the face of relentless threats.

**Data Science and Analytics.** ICF's data scientists, statisticians, and developers are part of the wave of innovation that is helping clients simplify and summarize data to support better decision-making.

**Emergency Management.** ICF provides expertise in planning, training, exercise development, continuity of operations, public communications, policy analysis, and program evaluation for all phases of emergency management.

**Energy Analysis.** ICF is one of the world's leading energy and environmental consulting firms and has built a reputation for unsurpassed analyses of current and future energy needs on a global scale. More than 1,700 professionals at ICF work on all aspects of the energy supply chain and its market, economic, environmental, and policy implications.

**Environment.** ICF works across sectors to provide innovative, forward-thinking solutions designed to achieve the most positive environmental outcomes possible. ICF provides in-depth, multidisciplinary services to support environmental reviews and impact assessments.

**Human Capital Management and Training.** Our team helps client attract, retain and develop a high-quality workforce. ICF's in-depth knowledge of advanced learning theory and technologies deliver the learning results you want through both digital learning and traditional methods.

**Policy and Regulatory Development.** ICF provides proven support and tools that help federal policymakers and regulatory offices meet their responsibilities at all stages of rulemaking.

**Program and Project Management.** ICF services help program managers achieve long-term program success in environments that demand optimal performance under tight budgets, strict regulatory mandates, and unforgiving pressures.



Leidos (formerly known as Science Applications International Corporation), was founded by J. Robert Beyster in 1969 and headquartered in San Diego, California. The Leidos of today is a Fortune 500® company headquartered in Reston, Virginia, that provides scientific, engineering, environmental, energy, systems integration, and technical services. Since our inception, we have continuously expanded our expertise in rapidly evolving technologies and markets of national concern. In August 2016, Leidos merged with Lockheed Martin's Information Systems & Global Solutions business (IS&GS) to form an unprecedented new global science and technology solutions leader to address the greatest technology





challenges of our time. Leidos conducts business from 350 sites worldwide with offices in 16 countries. We are a \$10B company that employs approximately 32,000 of the nation's leading scientists, technologists, world-recognized subject matter experts, patent holders, inventors, military veterans, and former high-ranking government officials. Leidos is continuously recognized for our high standard of ethics, top-quality work, and exceptional staff of with almost 8,000 employees holding advanced degrees, more than 13,000 holding government security clearances, and approximately 6,600 military veterans.

For more than 40 years, we have steadily built our nuclear security practice to keep pace with determined federal nuclear deterrence and nonproliferation missions. Supporting DOE's National Nuclear Security Administration (NNSA), Leidos assists Federal program managers to plan and evaluate efforts to sustain the Nation's existing nuclear weapons stockpile and minimize the threat of nuclear proliferation. We understand the challenges of maintaining U.S. nuclear weapons in a safe, secure, and reliable manner in the absence of underground nuclear testing. Our technical, engineering, and program management expertise supports the services across diverse contract areas consisting of program management, program budgeting and execution, nuclear engineering, materials science, systems engineering, earned value management, training, security management, nuclear nonproliferation, and emergency management.

Leidos is proud to be a partner to continue its legacy of providing technical expertise and analytical support in meeting NNSA's nuclear security mission.

**LMI** LMI is a **not-for-profit strategic consulting firm exclusively serving the federal government**. For nearly 50 years, LMI has been a recognized leader, forward-leaning authority, and go-to resource—distinguished by its strategic ingenuity, analytical excellence, and professionalism. Today, LMI employs more than 850 professionals in seven offices, and works with virtually every federal department and agency. More than 70% of LMI staff has advanced degrees. **LMI has more than 15 years of experience supporting NNSA and OECM**. They have also supported DOE EM for more than five years on a variety of projects. Moreover, their capabilities cross all government essential areas, such as acquisition, energy and environment, facilities and capital asset management, financial management, information and technology, logistics, and organizations and human capital.



MPR is dedicated to helping our clients achieve success by innovating market-leading technology solutions and processes that focus on sustainable business practices. We consider ourselves strategic partners with our clients, sharing in their perspective and sense of urgency, and we see ourselves as responsible industry leaders. Our culture of cross-disciplinary interaction, research, and knowledge-sharing helps us stay at the forefront of emerging technologies and anticipate trends and innovations. Because we break through difficult technology challenges and work across sectors and disciplines, we have the ability to react and adapt to any type of technology problem effectively.

MPR's proven problem-solving processes consistently yield simple, practical solutions for difficult engineering challenges. This is the result of creating a culture that incorporates strategic methodologies, collaboration, interaction, and sharing of expertise throughout the organization. As we explore choices and evaluate potential solutions, we always keep our client's business goals in mind.

MPR is an employee owned engineering and project management services company that provides high quality, high value services to the U.S. Departments of Energy, Defense and Homeland Security, commercial nuclear power, fossil power, renewable energy, and to the medical and consumer products industries. MPR specializes in owner's representative and owner's engineer services for large and complex projects, in engineering and project management support for first-of-a-kind projects, in development engineering activities, and in resolving difficult, mission critical technical problems. Our mission is to help our client's projects succeed.



MPR was founded in 1964 by three senior technical leaders in the Naval Reactors program. The MPR founders developed their careers and approach to engineering and project management in Admiral Rickover's Naval Reactors organization by developing, designing, and building the first nuclear submarines and the first U.S. commercial nuclear reactor at Shippingport. The founders built MPR on the Naval Reactors culture of business integrity, technical innovation, exceptional quality, and engineering excellence – a culture strong to this day.

MPR has 40 years of experience working with the Department of Energy since its inception in 1977. MPR provides engineering and/or project management support to NNSA (including the Offices of Nuclear Nonproliferation, Naval Reactors, and Defense Programs), Science and Energy (including the Offices of Nuclear Energy and Fossil Energy), Management of Performance (including the Offices of Environmental Management, Project Management Oversight and Assessment) as well as the Loan Guarantee Office. MPR has significant past performance at the majority of the DOE National Laboratories and project sites including Savannah River, Los Alamos, Idaho, Pacific Northwest, Brookhaven, Argonne, Oak Ridge, Hanford and Waste Isolation Pilot Plant.



### **POTOMAC INSTITUTE FOR POLICY STUDIES**

The Potomac Institute for Policy Studies provides nonpartisan, practical, and practicable analysis of science and technology policy to leaders in government, industry and academia. Our studies and policy reviews inform

government officials in a manner that carries on the legacy of the former Office of Technology Assessment (OTA) in the U.S. Congress, after which the Institute is modeled.

The Potomac Institute for Policy Studies is an independent not-for-profit policy research institute. The Institute identifies and aggressively shepherds discussion on key science and technology (S&T) and national security issues facing our society, providing an academic forum for the study of related policy issues. From these discussions and forums, we develop meaningful policy options and ensure their implementation at the intersection of business and government.

The Potomac Institute for Policy Studies follows two basic principles. First, we fiercely maintain objectivity and credibility, remaining independent of any federal or state agency, and owing no special allegiance to any political party or private concern. Second, we seek extensive collaboration with similar organizations, as well as with industry, academia and all of levels of government. We believe that the study of today's complex issues demands a wide variety of contributions from various perspectives. We are proud to call ourselves "fiercely objective" as a result of our track record in divorcing political issues from policy challenges.

The Potomac Institute for Policy Studies, comprised of its Board of Regents, Senior Fellows, Fellows, staff, and affiliates, includes scientific, technical, managerial and policy experts in the areas of defense, national security, and intelligence. Our staff includes research assistants, research associates, and senior science authorities that collect, synthesize, and analyze data from several topic areas of interest. Additionally, the Institute's comprehensive network of personnel and consultants extends its expertise and available science and technology resources.

Communications, medicine, biotechnology, neurotechnology, robotics, pharmaceuticals, nanotechnology, energy, and transportation are just a few of the fields in which technology is rapidly changing. These cutting-edge technologies and scientific innovations will have an enormous impact on our lives and present a new set of challenges for our society. The Potomac Institute for Policy Studies seeks to: 1) anticipate the problems our society will face in the future, and 2) work toward establishing meaningful policy options for addressing these problems before they come to fruition. The Institute is keenly aware that implementation of policy is perhaps the most difficult component in public endeavor. As a result, we do not merely conduct a world class study and provide a report. We roll up our sleeves as a think and "do" tank!



Professional Project Services (Pro2Serve®) is a **leading national security services provider** with technical and engineering expertise and capabilities in weapons program planning, facilities, and infrastructure engineering and management; Defense Nuclear Nonproliferation (DNN); DNS; and nuclear energy and environmental remediation. With more than **25 years of experience supporting DOE/NNSA** through a wide variety of contract vehicles, they bring directly relevant knowledge, experience and lessons learned focused on improving performance and reducing cost. Their experience ranges from application of technology to all aspects of nuclear weapons manufacturing, including manufacturing processes, certification, equipment, materials, and A-E services supporting all phases of the DOE/NNSA 413.3 project life cycle. A summary of their experience and expertise includes the following: performing more than **20 independent assessments** for NNSA on the **Highly Enriched Uranium Materials Facility** project at the **Y-12 National Security Complex**, and providing engineering and operations subject matter expertise to develop the ICE for UPF with PT&C; supporting more than **20 monitoring visits** to verify special nuclear material elimination at sites in **Russia for NA-24**, repatriating spent fuel from Indonesia, and providing **full life-cycle security upgrades** at radiological sites in **numerous countries for NA-21**; advancing the deployment and integration of leading-edge security technology to reduce overall costs across the DOE/NNSA complex through their position on numerous M&O teams at **LANL, LLNL and NNSS** and supporting interagency working groups developing the nuclear security Harmonization Plan, allowing **NA-70** to reduce overall R&D costs by coordinating with other government agencies; and developing the **ORO EM** integrated baseline, change management tool, and documentation in accordance with DOE O 413.3 for environmental liabilities across all the facilities in Oak Ridge, including Y-12.



Sigma Science, Inc. (SSI) is a **New Mexico (NM) based 8(a) certified small business with a DOE-EM approved, NQA-1 compliant quality assurance program.** SSI's dedication to making the world a safer, cleaner, and healthier place begins with the company's motto of "We Promise, We Perform, We Excel." This motto has been embedded in the company culture, and throughout its two-decade history, SSI has successfully lead technical projects by applying the best engineering, quality assurance, and project management practices. This culture of technical excellence has allowed SSI to provide clients with high quality solutions for complex challenges in nuclear safety, nuclear security, information technology (IT) and cyber security.

Through its technical reputation and portfolio of challenging projects, SSI is able to attract and retain industry-recognized technical experts that not only have decades of experience supporting projects throughout the DOE complex, but are also collaborative, communicative, humble, and thorough. The employees of SSI are the core of the company, and by performing to the highest standards of quality, SSI is supporting nuclear safety, nuclear security and cyber security projects.

SSI has been successful in developing Documented Safety Analysis and Technical Safety Requirements for DOE-EM, as well as providing project management and technical support to NNSA at Los Alamos. SSI has also assisted DOE-EM Headquarters in planning and executing its mission by providing technical, regulatory and environmental protection advice. Other projects that SSI has supported include: Authorization Basis development, Safety Basis Support, Safety/Risk Analysis, Nuclear Operations support, Criticality Safety Analysis, Health Physics support, Radiological Engineering, Conduct of Operations, ES&H, Primary Hazards Screening, and Readiness Reviews at Los Alamos National Laboratory (LANL), Sandia National Laboratories (SNL), Oak Ridge National Laboratories (ORNL), and Nevada National Security Site (NNSS) and Consolidated Nuclear Security (CNS).



SSI is supporting nuclear security projects at LANL, SNL, ORNL, NNSS and CNS. Activities performed by SSI personnel include: independent technical reviews of nuclear materials and fuels management strategies; developing and reviewing program plans; and providing support in engineering, system design, testing and analysis, material control & accountability, emergency management, vulnerability assessments, risk management assessments, training curriculum development, planning, organizing, coordinating, resource management, project scheduling, cost-accounting, and administration.

SSI personnel IT and cyber security accomplishments include: successfully designing, developing and implementing agency-wide ERP (NASA); successfully deploying the first DOE Fed Ramp accredited Cloud migration (NREL) for moderate level data; implementing in depth network and node level cyber defenses on internal and public facing low side networks including MF3 level access control; and supporting on-going DOE CI Cyber requirements.



Sol Oriens, LLC is a **Veteran Owned Small Business (VOSB)** founded in October 2005 in Albuquerque, New Mexico. Sol Oriens was established to provide superior quality technical and management services to the Department of Defense (DoD), Department of

Energy (DOE), and large industry partners. For more than a decade, Sol Oriens has provided material and non-material solutions to military and commercial partners through the development of advanced concepts and technologies. Sol Oriens' scope of expertise includes program and technology management, production center operations, test and evaluation, research and development, modeling and analysis, rapid prototyping, and product engineering.

Sol Oriens implements an agile management and personnel structure, which allows for cross utilization of skills and talent to meet the diverse needs of clients in the most economical means possible without sacrificing security, quality, speed, or reputation. Sol Oriens' staff members have developed a strong reputation of success in meeting and exceeding client requirements with exceptional performance at competitive cost.

Sol Oriens staff members have active DoD and DOE security clearances and specialty degrees in a wide range of engineering and science disciplines that include mechanical, civil, electrical, chemical, aerospace, aeronautics, astronautics, nuclear, radio frequency, systems, software, explosives, and industrial. Sol Oriens currently has 28 full-time cleared personnel with responsibility for all aspects of nuclear stockpile system management, planning, maintenance activities, assessment activities, studies, life extension and alteration programs. These staff members represent a deep well of knowledge and experience including electrical, mechanical, and industrial engineers, as well as physicists, software/math experts, and staff performing large-program management and risk control, scheduling, and earned value work.

As integral members of the NNSA DP management team, the Sol Oriens staff interfaces regularly and seamlessly with all levels of NNSA leadership, the National Security Enterprise (including each of the design agencies and production agencies), the Department of Energy (DOE), Congressional and Executive office staff and the Department of Defense (DOD). Our interface with NNSA and SNL allows us insight into programmatic requirements for the W76-1, W88 ALT 370, B61-12, and W80-4 life extension programs, as well as surveillance requirements. We will transparently keep separate the life extension/surveillance work we do at NNSA from the automated test equipment work we complete for SNL. Our insight will allow us to help SNL with testing requirements issues, Nuclear Enterprise Assurance issues, development and qualification, and production testing.



Systems Planning and Analysis, Inc. (SPA) provides timely and objective analysis and integrated technical, operational, programmatic, policy, and business solutions in support of important national objectives. SPA's distinguished reputation for over 45 years is based on high caliber work supporting national security and national defense customers. Headquartered in Alexandria, Virginia, we have offices and personnel around the country. We also provide services directly to Australia and Canada and indirectly to the UK through U.S. agreements. Our employees have expertise in an array of domains including: Air, Surface, and Undersea Warfare and Operations, Nuclear Deterrence, Safety, and Security, Radar and Sensor Systems, Ballistic Missile Systems, Integrated Air and Missile Defense, Department of Defense Acquisition Processes, Intelligence, Surveillance, and Reconnaissance Systems, Unmanned Systems, Space Systems, Improvised Threats and Analytic Software Development. SPA support to DOE/NNSA includes work **supporting NA-70** in developing the DNS- led process to independently verify the results of Vulnerability Assessments. SPA has also supported independent evaluation and review of site incidents to verify root cause analyses and support development of corrective actions.



The Systems and Proposal Engineering Company (SPEC Innovations) was formed in 1993 to advance the art and science of proposal development by applying systems engineering techniques and to use proposal techniques to better communicate the results of systems engineering and architecture work. SPEC Innovations is a **woman-owned small business**. SPEC Innovations has started a number of leading edge systems engineering efforts for advanced systems and architecture programs, including recent work on a NNSA enterprise requirements database, analysis of alternatives, and strategic stockpile model. This combination of technical expertise and the ability to communicate results provides cost-effective program support for all our clients.

We developed a cloud-based, commercial-off-the-shelf, integrated program management and system engineering tool (Innoslate®), which implements the Lifecycle Modeling Language (LML). Innoslate is currently in use by NNSA, Idaho National Laboratory, LLNL, and Sandia National Laboratory. Innoslate is available on NIPRNET, SIPRNET, and NESAN. TS/SCI cloud access is also available.

A book on DoD AF, entitled "DOD Architecture Framework – A Guide to Applying System Engineering to Develop Integrated, Executable Architectures," written by Dr. Steven H. Dam, is available on Amazon.com. He based this book on SPEC Innovations' proven architecture development methodology, which is also the basis for its training courses. He also co-authored a chapter on Concepts of Operations for the Applied Space Systems Engineering book sponsored by DoD and NASA.



Spectra Tech, founded in 1995, is an engineering and environmental services company working on engineering, environmental and nuclear projects worldwide for its clients, which include U.S. Federal agencies, government contractors, and private commercial companies. In 2014, Spectra Tech acquired BAT Associates, Inc. as a wholly-owned subsidiary, expanding Spectra Tech's environmental services offerings and expertise. Throughout the company's history, Spectra Tech has maintained an excellent track record for customer satisfaction, high employee morale, and job safety.

Classified as a small business under its primary NAICS code of 562910, Spectra Tech was certified as a Minority-Owned Business in 2010 with the Tennessee Minority Supplier Development Council (TMSDC) and as a Disadvantaged Business Enterprise with the State of California in 2014. Our highly qualified and experienced professional staff members are committed to providing clients with the highest level of service. Spectra Tech engineers and scientists have backgrounds in engineering, nuclear criticality safety, nuclear safety, operations, radiation protection, regulatory compliance, construction management, environmental remediation, hazardous and radioactive waste management, decontamination and decommissioning (D&D), Quality Assurance, training, contract management, and procurement.

Spectra Tech's team of vetted professionals represent the most qualified, experienced personnel in the industry. Our staff includes Ph.D.-level engineers specialized in Nuclear Criticality Safety (NCS) and radiological engineering. Spectra Tech staff have extensive NCS leadership experience in the DOE Complex. As an example, a key Spectra Tech staff member has supported NNSA Headquarters as the National Program Execution Manager for the U.S. Nuclear Criticality Safety Program (NCSP), providing support to NNSA in the management and execution of NCSP work tasks at eight sites in the DOE Complex. With regard to nuclear and facility operation capabilities, Spectra Tech provides technical guidance in support of materials management, nuclear facilities, and radiological protection programs by performing safety risk assessments, assisting in the development of facility specifications, and developing survey programs to ensure compliant radiation safety programs. In addition, Spectra Tech employs a range of certified personnel who specialize in Industrial Hygiene, Waste Management, Environmental Safety and Health (ES&H) and Health Physics. With in-depth knowledge of regulatory requirements and extensive experience in supporting the programmatic needs, our expertise enables us to quickly identify problems, develop approaches to resolve issues, and implement cost-effective solutions for our customers.

Spectra Tech has extensive environmental and engineering capabilities. Specifically, Spectra Tech provides a multitude of environmental compliance and remediation activities for government and private industry customers covering compliance documentation, on-site sampling, waste characterization and disposition, strategic planning and remediation. Spectra Tech offers high quality, cost-effective engineering services to government and industrial clients worldwide. Spectra Tech is a recognized leader in providing a broad range of management, technical, and operational engineering services to the energy and environmental sector.



Strategy Consulting Team is a **Woman-Owned Small Business (WOSB)**, specializing in organizational assessment and improvement, strategy development and execution, human capital strategic planning, workforce analysis and design, data analysis and visualization, and other special studies. Additionally, Strategy Consulting Team provides leadership development and coaching services, and group facilitation. Strategy Consulting Team staff are experienced practitioners, and have developed NNSA workforce plans, staffing analyses, and conducted NNSA workforce planning exercises. Strategy Consulting Team has supported NA-MB and NA-10.



Success Staging International has been **advising and consulting as a specialized small business for more than 7 years, primarily with large corporations supplying prime-contractor services to U.S. Government sectors.** Success Staging International is committed to helping organizations improve the way they “think, decide, execute and expand”. Success Staging International has been supporting large

Management and Operating (M&O) contractors overseeing the operations at **U.S. DOE National Nuclear Security Administration (NNSA) and Environmental Management (EM) sites, which includes Weapons Production sites, National Research Laboratories, and Environmental priority clean-up sites.** Success Staging International has a proven track record, measured by successful implementation and duration of engagements. Staff are practiced in areas required to increase success for clients, focused on verifiable improvements, which includes change management and systems-thinking as a foundation. **Success Staging International has a broad network of executive and professional contacts** with whom we work with and communicate regularly, adding together a depth of skills and experience that assures client success.

#### **FOCUS AREAS AND CORE COMPETENCIES:**

##### **ENTERPRISE GOVERNANCE, MANAGEMENT OPERATING SYSTEMS**

*Increase "value" of products or services for clients, employees and company principals or owners*

- Establish alignment and consistency ‘*top-down to bottom-up*’, and mentor a continuous improvement culture
- Enable a corporate change management framework ‘*culture, leadership, talent effectiveness*’

##### **RISK MANAGEMENT, PROGRAM AND PROJECT MANAGEMENT AND SPECIAL STUDIES**

*Improve Data, Improve Decisions, Improve Bottom Line*

- Evaluation and implementation of Program/Project Management Operating System (PMOS)
- Success Staging International’s Enterprise Risks Issues Management (ERIM) ‘*takes ‘ERIM’ to a higher level of performance*’

##### **PROCESS FOCUSED INTEGRATION**

*Save Time, Save Resources*

- Processes, Software and Services ‘*for state-of-the-art real-time management of high-value assets*’
- Implementing Leading Technologies and Approaches ‘*for situational awareness in daily operations*’

##### **CONTRACT PROPOSAL DIFFERENTIATORS**

*Increase Wins, Increase Value*

- Creating, Enhancing Winning Themes
- Establishing ‘Honest’ Success Likelihood

ENTERPRISE-WIDE TECHNICAL & ENGINEERING SUPPORT ALLIANCE



The **Enterprise-Wide Technical and Engineering Support Alliance (E-TEESA-2)** offers the talent, innovation and proven performance of the nation's leading providers of integrated technical, engineering, project and program management services.

With its technical, engineering and management expertise and the capabilities of world-class partners, **E-TEESA-2** will efficiently accomplish the varied mission challenges across the Department of Energy and National Nuclear Security Administration.

