

CAPABILITIES STATEMENT

2011

Longenecker & Associates, Inc.

*Innovative and cost-effective solutions to challenges in the
environmental management, defense and energy
industries since 1989.*



THE L&A TEAM'S CORE VALUES

- ✓ Honesty and integrity above all else.
- ✓ No surprises for the customer or the team.
- ✓ Consistently exceed the customer's expectations.
- ✓ Listen to the customer, make sure we're working on the right problem, and be flexible.
- ✓ Always seek arrangements that we are proud of and that are win-win.
- ✓ Work on projects that are nationally significant, and that we can be proud of the results.
- ✓ Assure that people are fairly compensated for their contributions.
- ✓ Don't take risks with the reputation of the individuals or the company.
- ✓ Foster trust among our team and with our clients.
- ✓ Always work as a team and support one another.

CORE CAPABILITIES

Longenecker & Associates (L&A) is a management and technical services company specializing in project management, engineering, energy, environmental and regulatory issues. With a number of senior, recently-retired successful government and industry executives, L&A has a proven record of helping our clients find and resolve problems before they become significant and costly.

Our expertise includes:

- Project assessment and recovery, including Department of Energy (DOE) 413.3 compliance
- Independent technical and management assessments, external independent reviews, including alternative financing proposal reviews
- Quality assurance services for project life cycle (nuclear and non-nuclear)
- Regulatory compliance, including Nuclear Regulatory Commission (NRC) licensing support, regulatory strategy development.
- Owner's representative services for projects.
- Project and Construction Management services
- Project Estimating and Scheduling
- Strategic planning, proposal development and review.
- Integrated safety management program development and reviews
- Cost-effective contractor assurance and governance systems
- Executive level and technical consultation and support to major Government Programs
- Process improvement, reengineering
- Management, engineering and operations support – improvement through coaching/mentoring in key functional areas
- Requirements streamlining and cost-effective compliance strategies
- Nuclear fuel cycle consulting
- Configuration management including requirements management and issues management
- Safety/Authorization Basis development, review, and support
- Life cycle functions, human resources, organizational design and development, and safety conscious work environment
- Training and leadership development, implementation of effective nuclear safety culture, and change management
- Contract transition facilitation
- Project cost estimating and construction management planning

We are experienced and well versed in dealing with the diverse requirements for both government and private sector organizations and cultures, and are fully committed to assuring that clients' critical program milestones are successfully met.

Examples of our performance include:

- Developed and implemented cost effective quality assurance and regulatory compliance programs for clients throughout the DOE complex including Las Alamos National Laboratory (LANL), Argonne National Laboratory (ANL), DOE Office of Nuclear Energy, Hanford and the Yucca Mountain Project (YMP).
- Developed performance assurance and governance programs for clients.
- Provided executive level and technical consultation services to Office of Assistant Secretary for Nuclear Energy.
- Reviewed effectiveness of QA programs for DOE projects and programs, and for commercial suppliers.
- Addressing QA, regulatory compliance and configuration-management issues related to the Hanford tank farms. Performed reviews of cost/schedule baselines for tank farms and other major Hanford work elements for DOE and contractors.
- Provided support to Department of Energy (DOE) sites in planning and implementing effective strategies for dealing with their regulators and oversight bodies.
- Performed QA management assessments and assisted the Yucca Mountain Project (high-level nuclear waste disposal project) in preparing for Nuclear Regulatory Commission (NRC) licensing and defining a management culture to support licensing. Supported Yucca Mountain Project (YMP) efforts to validate technical data for NRC licensing. Provided management support for establishing the DOE nuclear waste transportation program.
- Assessed Integrated Safety Management System (ISMS) program effectiveness at multiple DOE sites.
- Managed activities of Energy Facility Contractors Group (EFCOG) including integrated safety management, safety analysis, maintenance, Price Anderson compliance, project management, infrastructure, acquisition management, and engineering working groups.
- Implemented issues management and corrective action tracking systems at DOE sites. Assisted in implementation of an ESTARS based problem reporting and corrective action system at Hanford.
- Developed and implemented requirements streamlining programs to enhance productivity and reduce costs.
- Prepared and performed independent reviews for DOE and commercial facilities.
- Prepared Independent Government and Client cost estimates and project schedules
- Conducted a review of engineering processes and procedures for the Yucca Mountain Project.

- Provided nuclear operations support to Tank Farms and Spent Fuel projects.
- Developed competitive strategies, conducted assessments of potential teaming arrangements, assessed competitors, developed and reviewed proposals, and assisted in oral preparation for government procurements.
- Provided technical support to the Blue Ribbon Commission on America's Nuclear Future.

Established in 1989, Longenecker & Associates (L&A) is a consulting firm that provides highly specialized, fast-response technical and management support to the nuclear, environmental management and defense industries. Longenecker & Associates, a small, woman-owned and managed business, employs senior management and technical specialists offering our clients a broad base of highly specialized support. Our team is results oriented and we have a proven track record of significant accomplishments and client satisfaction. We are well versed in both the private and public sectors.

Our unique qualifications include:

- Executive, Senior engineering and management personnel each with 20-40 years experience.
- Over 30 years experience in working with DOE and nuclear utilities, including management at all sites.
- Extensive commercial nuclear power experience, including NRC licensing and Quality Assurance.
- Integrator for Energy Facility Contractors Group (EFCOG) on policy issues including integrated safety management, project management, acquisition management, infrastructure improvements, security, governance, and maintaining core competencies.
- Selected to conduct reviews and assessments of key projects, programs and institutions including the DOE Office of Civilian Radioactive Waste Management repository and transportation projects, Hanford Waste Treatment Project (WTP) and Tank Farms, Lawrence Livermore National Laboratory (LLNL), Los Alamos National Laboratory (LANL) and the Idaho National Laboratory.
- Over 20 years experience in facilitating planning meetings and team problem-solving workshops.
- Membership on key DOE project management and safety oversight panels including YMP, LLNL, LANL, and Hanford.
- Active membership and service on boards of directors and committees in key nuclear organizations including Nuclear Energy Institute and American Nuclear Society.

QUALITY ASSURANCE / REGULATORY COMPLIANCE

Commercial – Environmental – Nuclear

Longenecker & Associates has extensive experience in finding and resolving regulatory compliance and quality problems before they become showstoppers.

Our expertise includes:

<i>Integrated Management Systems</i>	Design and develop management systems to integrate quality assurance, safety management, and project management requirements into one management system.
<i>QA Management and Independent Assessments</i>	Plan and conduct assessments for large, complex programs and projects in a highly regulated environment using unique assessment techniques that provide meaningful results with minimum time onsite.
<i>Graded Processes</i>	Develop risk-based approach for developing implementation procedures to improve productivity
<i>Coaching and Mentoring Key Positions/Training</i>	Knowledge and leadership transfer to expedite the learning curve for new personnel. Fill in key positions with experienced managers during the recruiting period
<i>Software Quality Assurance</i>	Proficient with the principles and techniques of software life cycles, baselines, verification, validation, and software configuration management including appropriate software documentation
<i>Root Cause Analysis</i>	Conduct effective root cause analyses using several proven methods such as fault tree analysis taking into account behavioral and other contributing factors.
<i>Codes, Standards, Regulations, and Directives</i>	Proficient in DOE Directives and Orders, NRC regulations, EPA regulations, and industry codes and standards.
<i>Experienced and Certified Staff</i>	Professional Engineers, Certified Quality Engineers, Certified Quality Managers, Certified Quality Auditors.

L&A Accomplishments:

- Conducting QA management assessments for DOE's OCRWM, including participating national laboratories, for the NRC licensed Yucca Mountain Project.
- Provided QA support to the Advanced Centrifuge Plant project in Portsmouth Ohio.
- Reviewed effectiveness of QA programs for DOE's Office of River Protection at Hanford.
- Participated in Integrated Safety Management System reviews to determine effect of quality programs on safety.
- Mentoring tank farm contractor QA managers.
- Developing an integrated management system for DOE-OCRWM's Office of National Transportation.
- Assisting in the development and execution of a regulatory oversight strategy for the Hanford Waste Treatment Plant.
- Developed and implemented cost effective quality assurance and regulatory compliance programs for clients throughout the DOE complex including DOE Office of Nuclear Energy, LANL, Hanford and YMP.

PERFORMANCE ASSURANCE

Performance assurance is a cost effective approach to finding and fixing problems before they impact mission success.

Introduction to Performance Assurance

Performance Assurance is a valuable management tool that when utilized properly, can increase a contractor's fee earning potential and reduce the life cycle costs for the client. Performance assurance involves management identifying the critical few challenges to mission success and then implementing an assessment program that is tailored to identify problems in these areas and propose solutions.

Performance assurance systems are intended to provide a high degree of confidence that existing management systems and processes are adequate and effective for the work being performed. Adequate and effective management systems, when properly implemented, ensure that the public, workers, the environment, and national assets are adequately protected, and that business operations are performed effectively.

Performance Assurance encompasses environment, safety, and health programs, safeguards and security, cyber security, emergency management, and business operations. A comprehensive Performance Assurance Program is provided through integration of systems, programs, processes and procedures such as self, management, and independent assessments; incident reporting; issues management; lessons-learned; and performance metrics.

For DOE contractors, a robust performance assurance program is required by DOE P 226.1, *Department of Energy Oversight Policy*. This policy and implementing order states the need to implement an assurance system that ensures compliance with applicable requirements, pursues excellence through continuous improvement, provides for timely identification and correction of deficient conditions, and verifies the effectiveness of completed corrective actions. Additionally, the system must determine whether programs, management systems, and assurance systems comply with requirements and are effectively implemented.

Key Performance Assurance Steps

- ✓ Identify deficiencies and opportunities for improvement
- ✓ Prepare corrective action plans
- ✓ Ensure corrective actions are completed and are effective
- ✓ Provide for continuous improvement

Performance Assurance Services

Longenecker & Associates provides highly experienced technical and management personnel to assist our clients in developing a well integrated, comprehensive Performance Assurance Program for compliance with DOE Order 226.1. L&A can assist in a variety of ways, including:

- Assessments of current activities and recommendations for improvement.

- Assistance in developing and implementing a comprehensive, integrated Performance Assurance Program.
- Providing experienced personnel as mentors and advisors.
- Conducting independent and management assessments.
- Providing expert personnel to participate in self-assessments.

Activities of Specific Interest

- Assessments (including self-assessments, management assessments, and independent assessments).
- Operational awareness activities (management walk-through).
- Quality assurance programs.
- Issues management programs.
- Lessons-learned programs and worker feedback solutions.
- Accident investigations.
- Performance indicators/measures.
- Event reporting processes and causal analysis.
- Identification of corrective actions and recurrence controls.
- Corrective action tracking and monitoring.
- Closure of corrective actions and verification of effectiveness.
- Trend analysis.

Experience Related to Performance Assurance

- Performance Metrics benchmarking and recommendations for improvement – Hanford Tank Farms.
- Performance Assurance assessment and recommendations, program development – Lawrence Berkeley National Laboratory.
- Mentors/Advisors – United States Enrichment Corporation (USEC) Gaseous Diffusion Plants.
- Independent assessments for Hanford Management & Integrating Contractor and Tank Farms Operating Contractor, Pacific Northwest National Laboratory (PNNL), the Office of River Protection (Hanford), and other DOE and commercial sites.
- Developed Corrective Action System for Ontario Hydro Nuclear.
- Implemented Corrective Action System for Los Alamos National Lab (LANL).
- Implemented Problem Evaluation Reporting system at Hanford Tank Farms.
- Implementation of new Issues Management and Management Assessment procedures at LANL.

- Implementation of a new Issues Management and Tracking software at LANL.
- Process and procedure improvement for the DOE/OCRWM Office of National Transportation.

PROJECT MANAGEMENT

PROJECT – A temporary endeavor undertaken to create a unique product, service, or result.

PROJECT MANAGEMENT – The application and Integration of project management processes for initiating, planning, executing, monitoring, controlling, and closing a project on time and within budget.

In providing highly specialized, fast-response technical and management support to address our clients' Project Management issues, Longenecker & Associates assists clients in a variety of ways including:

- Supplementing our client's staff with highly-experienced Project Managers.
- Providing Project Manager mentors and advisors.
- Assisting with the development of project control tools, systems, and procedures, work planning, scheduling and estimating baseline development, project trending, change control, work package development and maintenance, critical path analysis, and performance monitoring, reporting and analysis.
- Trouble-shooting and problem solving for complex projects.
- Performing external independent reviews under DOE Order 413.3, including performance baseline reviews and alternative financing proposal reviews
- Conducting Independent Assessments, including independent cost estimating and project scheduling.
- Providing expert personnel to participate in Self-Assessments.

Our personnel are veterans, who are knowledgeable and skilled at working to: identify requirements; establish clear and achievable objectives; establish metrics, balance the competing demands of quality, scope, time, and cost; adapt specifications, plans, and approach to the different concerns and expectations of stakeholders.

Typically, DOE projects are among the most challenging because they are frequently one-of-a-kind using complex systems and technologies in a first time application. This work calls for the delivery of large, complex projects, while satisfying major DOE objectives that include obtaining quality products, ensuring timeliness of performance, controlling cost, and mitigating adverse events.

L&A personnel can help you deliver successful projects that meet DOE objectives. We provide expertise to assist you in any of the following areas:

- Project Management Manuals and Procedures
- Risk Analysis and Risk Management
- Project Execution Plans

- Configuration Management
- Project Controls System Descriptions
- Performance Assessment
- Performance Requirements
- Performance Metrics
- Strategic Planning
- Project Reporting
- Baseline Definition (Scope, Schedule, Cost)
- Project Reviews
- Baseline Control and Change Control
- Readiness Reviews
- Earned Value Management
- Lessons-Learned

L&A Accomplishments

- DOE O 413.3X compliance assessments and recommendations for improvement.
- Configuration Management assessment and recommendations for improvement.
- External Independent Review (EIR) in the areas of project management; facilities and construction; business finance, contracting, and capital finance; environmental; and nuclear regulation – Hanford Waste Treatment Plant, Oak Ridge Y-12 National Security Complex Command Center.
- Independent Government cost estimate and project schedule for Next Generation Nuclear Plant (NGNP)
- Performance Metrics benchmarking and recommendations for improvement – Hanford Tank Farms.
- Project Management of efforts for Advanced Mixed Waste Treatment Plant certification – Idaho National Laboratory.
- Mentors/Advisors – Gaseous Diffusion Plants, DOE, and USEC.
- Reviewed Yucca Mountain Project Transition Plan (from scientific investigation to NRC licensing).
- Project Management Manual/Procedures development – several small business clients.
- Reviewed and validated the programmatic baseline for a Hanford site contractor.
- Successful management and oversight of Decontamination & Decommissioning (D&D) projects.

STRATEGIC PLANNING, BUSINESS DEVELOPMENT AND COMPETITIVE ASSESSMENT

Longenecker & Associates provides highly experienced management personnel to assist our clients in the full range of activities necessary to effectively compete in the DOE marketplace. Our senior personnel are typically engaged in a variety of areas, including:

- Strategic planning and assistance for entry into the DOE market
- Identification and assessment of opportunities in the DOE market
- Advocacy before DOE and its officials
- Assessment of potential competitors (black hat assessments)
- Assessment of potential team mates
- Development of win themes and proposal strategies
- Proposal preparation assistance
- Proposal review and assessment (Pink team, Gold team, Red team, etc.)
- Orals preparation and coaching
- Contractor transition facilitation

DOE is not a monolithic organization, and each program/field office approaches competition to fulfill its needs differently. L&A's senior personnel continually assess the opportunity horizon in DOE on behalf of its clients.

Several of our senior personnel who assist clients in these areas typically have had extensive experience as senior executives in DOE. Most have more than 30 years experience in multiple DOE program and support offices and in DOE headquarters and in field organizations. L&A senior personnel have experience in NNSA and DOE-OCRWM, Environmental Management, Science, Nuclear Energy, and Office of Management-Procurement and Assistance Management. L&A managers maintain close contacts with DOE to assure a good understanding of its programs, policies, and priorities.

L&A, as a small business, also has the ability to partner with bidders to support a variety of activities including internal controls, performance assurance, project management, quality assurance, NRC licensing, and independent assessments.

Once L&A has assisted clients in winning the contract, L&A has unique expertise to assist with the contract transition. Our team of experienced senior subject matter experts can assist in performing the due diligence activities necessary during contract transition thereby freeing up contractor personnel to perform other critical tasks, such as organization staffing. Our experienced facilitators can keep the transition team focused, on task and on schedule.

L&A has assisted clients in the following areas:

- Development of strategic plans to focus on market entry opportunities

- Bid/no bid decision making
- Assessments of bidders and potential competitors
- Evaluation of potential team mates
- Preparation of selected portions of proposals
- Red, Gold, and Pink team participation and leadership
- Identification of possible team mates to address weaknesses and strengthen bids

Let Longenecker & Associates help you and your team ensure success in your initiatives in the DOE marketplace.

SAFETY BASIS MANAGEMENT

Longenecker & Associates provides highly specialized, fast-response technical support to address our clients' Safety/Authorization Basis issues. L&A assists our clients in a variety of ways including:

- Supplementing client's staff with highly-experienced safety analysis personnel to assist with Unreviewed Safety Question (USQ) analysis and safety basis document development.
- Providing turnkey Safety Basis documents including Documented Safety Analysis Reports and Technical Safety Requirements.
- Providing advice on licensing strategy.
- Conducting independent reviews to ensure compliance to Federal regulations and guidance.

Our personnel are knowledgeable veterans who have worked at sites throughout the DOE Complex as well as with a number of nuclear utilities. Thus, they possess a wealth of experience and best practices that can be readily and efficiently applied to a particular client project. L&A prides itself on producing Safety Basis documents that enable project personnel to accomplish their work in an efficient, technically sound manner.

L&A personnel can help you deliver successful projects that meet DOE objectives. We provide expertise to assist you in any of the following areas:

- Licensability reviews.
- Preliminary and Final Documented Safety Analysis preparation, review, and implementation.
- Price Anderson Act Amendment investigations.
- Unreviewed Safety Question preparation.
- Technical Safety Requirements preparation and implementation

L&A Accomplishments

- Senior Technical Team advising the Hanford Waste Treatment Plant Regulatory Oversight Officer, DOE Office of River Protection.
- Documented Safety Analysis Final Review – Hanford Tank Farms.
- USQ preparation for the Hanford K Basins.
- USQ process review, assessment, and rework for DOE G 424.1-1 Ch 2 considerations.

HUMAN FACTORS AND ERGONOMICS

Longenecker & Associates provides human factors and ergonomics support to government, manufacturing, and commercial clients with a full range of services necessary to enhance productivity and efficiency while reducing accidents and injuries and associated costs. Generally projects result in the successful resolution of concerns and situations that have historically resisted conclusion.

Key services include:

- Manage programs geared toward regulatory compliance (NRC, OSHA, EPA).
- Integrate work practices and standards with leading edge technology and automation.
- Enhance productivity and efficiency in manufacturing processes.
- Increase worker well-being; reduce accident and injuries.
- Accomplish detailed control room design reviews (DCRDR).
- Develop compliance and training programs.
- Perform task analysis leading to taxonomy development.
- Ensure project delivery on-time and within budget.
- Serve as liaison between agencies, organizations, customers, vendors, and suppliers.
- Conduct assessments to evaluate team communication and performance, and facilitate problem resolution.
- The L&A team first establish clear project objectives, including:
 - Regulatory compliance
 - Enhanced communications
 - Cost reduction
 - Reduced downtime and scrap
 - Improved efficiency and productivity
 - Ensured quality
 - Increased safety and health
 - Improved worker well-being
 - User satisfaction and acceptance
 - Litigation avoidance

Our experience includes:

- human factors and ergonomics needs assessment
- evaluations
- reviews of human interfaces
- designs, workstation and workplace layouts
- work practices and standards
- process flow
- training
- implementation support

Innovative approaches that integrate safety and health, management, Quality, and automation create cost effective solutions. Human factors emphasis is focused on the human-machine interfaces required for ensuring the elimination/ reduction of human error, safety functions, increasing personnel safety, productivity and efficiency. Human factors are considered in facility performance failures, accidents or injuries, or poor productivity or quality operations where humans are relied upon for preventive actions (e.g., system operations, surveillance testing, and maintenance activities during normal operations) and for mitigative actions during off-normal and emergency conditions. The extent of the application of human factors is based on a tailored approach commensurate with extent of the human interaction, the overall design efforts, and the risk associated with human.

MEETING FACILITATION AND TEAM PROBLEM SOLVING

Longenecker & Associates provides meeting facilitation and team problem-solving workshops to organizations who seek skilled, objective facilitators to develop and run complex meeting agendas, and to develop highly functioning teams.

Key Services: General Meeting Facilitation

- Pre-interview meeting participants to determine issues
- Assist in clarifying meeting objectives and desired outcomes
- Develop an agenda that supports the objectives
- Keep the meeting on track
- Process discussions or decisions when a group is unable to resolve differences
- Ensure that ideas and suggestions are understood
- Facilitate decision-making, document decisions, and assign timelines
- Provide a written report (when requested)

In our experience, an outside facilitator can run a meeting more objectively, has more time to dedicate to planning a meeting, and has the skills to ensure that the meeting stays focused and progresses productively and effectively.

Key Services: Team Problem Solving

(This service is provided to teams experiencing interpersonal or functional difficulties, and who are unable to resolve them on their own.)

- Determine the client's needs and objectives
- Meet with the team to explain the problem-solving process
- Schedule and interview all team members to determine issues and build rapport
- Design a workshop for the team to discuss and work through issues
- Facilitate a productive and respectful workshop
- Help the team identify specific and clear action items
- Assign people to action items with dates for implementation
- Identify roadblocks to completion and how to overcome them
- Provide a written action plan and report
- Schedule a follow up meeting to evaluate progress

Our goals are to create an environment where people feel safe enough to air out their issues, to speak honestly, and are motivated to improve their working relationships. We offer extensive experience in working with conflict, facilitating teams with histories of disagreements and

incompatibility, and helping teams to identify new ways of working together. We also provide coaching services to support the manager or supervisor of a team to hold the team accountable for making the agreed-upon changes over the long-term.

Experience includes:

- Working with many types of teams in diverse organizations – public, private, and non-profit
- Needs assessments through the interview process
- Design of meeting objectives and workshop agendas
- Facilitating business, team-building, and strategic planning meetings
- Extensive background in working with conflict
- Conflict management training programs
- Communication training programs
- Training programs for dealing with change
- Group process and facilitation work
- Supervisory and management coaching



Front Row (left to right): Jim

Gallagher, Bobby Savoie, Jeff Baxter, Troy Wade, Pam Horning

Back Row (left to right): Tyler Przybylek, Warren Bergholz, Ted Quinn, George Jackson, Mark Frei, Ron Stevens, John Longenecker, Oliver Hemmers, Bob Merriman, Steve Allred

L&A BOARD

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Senior Leadership Team

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