

## **RICHARD F. SENA**

### **EXPERIENCE SUMMARY**

As a member of the Senior Executive Service in the NNSA, I provided executive leadership in the management of technical programs, operations, and business processes critical to the Nuclear Security Enterprise. I led numerous studies to address technical issues impacting the laboratories and production sites, applying systems engineering and risk analysis tools to develop cost effective and timely solutions. I led several priorities including repackaging pits at Pantex to address a DNFSB Recommendation to protect pits from degradation, removal of plutonium pits and plutonium metals and oxides from Rocky Flats, led the DOE complex plutonium storage study for Environmental Management and Defense Programs that established a plan for consolidation of storage of excess plutonium across the DOE, eliminating the need to construct a \$1B plutonium storage facility at Savannah River and served as the planning basis for accelerating movement of all Pu metals and oxides from LLNL, Hanford, LANL and Rocky Flats to an existing facility at Savannah River. As Deputy Manager of the NNSA Sandia Field Office, provided executive leadership of the Field Office in oversight of Sandia National Laboratories national security programs.

### **DETAILED EXPERIENCE**

#### **Longenecker & Associates**

February 2014-Present

Provide expert services to NNSA and industry pursuing NNSA M&O Contracts. Key assignments include:

- Support to NTESS on Sandia Transition.
- Red Team Member for NTESS Sandia Proposal.
- Prepared the Risk Management Plan and Performed the Risk Analysis for the NNSA project for replacement of the Albuquerque Complex.
- Supported NNSA in the Turnover/Startup of the Pantex High Explosives Pressing Facility, including performing the Risk Analysis associated with several non-compliant issues.
- Supported NNSA on an analysis of alternatives for the LANL TA-55 Plutonium Facility, performing the Risk Analysis for Fire Alarm Upgrades within the plutonium facility.
- Supported NNSA on an independent cost estimate for the LANL TA55 Plutonium Facility, reviewing the LANL project Risk Analysis.
- Safety Basis lead for NNSA Independent Project Review of the LANL TRU Waste Storage Facility.

#### **Federal Service**

##### **Deputy Manager – NNSA Sandia Site Office (SES)**

May 2011-January 2014

I served as Deputy Manager of the NNSA Sandia Field Office, directing an organization of over 84 engineers, physical scientists and administrative staff with responsibility for administration of the Sandia National Laboratories management and operating contract. As the NNSA Site Office Deputy, I led the day to day interface with senior laboratory leadership regarding laboratory research, operations for NNSA and other national security mission activities. Of primary importance was the collaboration with NNSA weapons program offices and Sandia National Laboratories in the delivery on weapon program

requirements and with NNSA nonproliferation programs. Provided oversight of Sandia Weapons QA, weapons quality acceptance inspections, neutron generator production, security, Contractor Assurance System, and regulatory compliance. As a Senior Technical Safety Manager, I was the approving authority for all nuclear safety basis documents for Sandia's Technical Area V nuclear facilities.

**Deputy Director – NNSA Service Center (SES)**

June 2010-May 2011

Served as the Deputy Director of the NNSA Service Center, providing executive leadership and management of 480 engineers, physical scientists, attorneys, business and administrative staff, and 6 Senior Executive Service Managers. Provided executive leadership in the management and continuous improvement of all technical, financial, business, personnel security, physical security and legal for the support of NNSA HQ and each of the NNSA field offices. Oversaw the successful Accreditation of the Service Center's Technical Qualification Program.

**Deputy Associate Director – Office of Technical Services**

June 2009-June 2010

Provided leadership to the office of over 100 engineers and physical scientists with assigned responsibility for supporting the Nuclear Security Enterprise in the areas of Nuclear Safety, Conduct of Operations, Occupational Safety and Health, package certification for the shipment of weapon components and nuclear materials, project management, and support to the nuclear non-proliferation program.

**Manager – National Security Department**

March 2002-June 2009

Led a staff of 35 engineers and physical scientists in performing the safety analyses of packages for nuclear weapon component and assembly shipments by NNSA's Office of Secure Transportation and the performance of packaging and transportation assessments at NNSA sites. The primary customers were the DOE/NNSA sites requiring movement of nuclear materials and the NNSA weapon program managers requiring shipment in support of mission objectives. The office also provided support to the NA-20 nuclear non-proliferation program.

**Team Lead – Contract to Improve Management and Performance at Sandia**

January 2001-March 2002

In February 2002, as part of the President's Management Agenda to restructure the newly formed NNSA and improve how it contracts with its national laboratories, I was tasked by the Principal Deputy Administrator of the NNSA to lead a team of technical, legal, and contractual experts from the field and headquarters to develop a new contracting approach for Sandia that would rely more on private sector approaches to performing the work in management and performance at Sandia National Laboratories to achieve continuous improvement. The model was based upon extensive input from industry and from DOE/NNSA contractors and upon benchmarking of high performers inside and outside of the government that included Exelon Nuclear. From this effort, several new departmental management and contract initiatives were developed and used across DOE including the use of Award Term as a contractual incentive and Contractor Assurance Systems for continuous improvement upon which DOE Order 226.1B was derived.

**Director – Nuclear Materials Stewardship (SES)**

September 1997-January 2001

Led the Nuclear Material Stewardship Project Office in performing Systems Engineering Analysis across the DOE complex for storage, stabilization, consolidation, and disposition of excess plutonium and other nuclear materials and management of all excess pits at Pantex. Served as DOE Program Manager for the DOE Plutonium R&D Project performed in LANL TA-55 in support of plutonium stabilization and disposition. Performed the DOE Plutonium Storage Study that resulted in acceleration of plutonium consolidation. Lead the de-inventorying of Pu pits and Pu metals and oxides from Rocky Flats as the first key step in the ultimate disposition of the site.

**Acting Area Manager – Mound Plant**

August 1992-January 1993

As Acting Area Manager, was responsible for providing executive leadership and oversight of contractor operations for all weapons research and development support, the production of weapons components, and for environmental cleanup of plutonium, tritium and hazardous wastes. Played a key role in the interface with the community during the non-nuclear reconfiguration studies that were highly contentious but which ultimately resulted in the closure of the Mound Plant as part of the weapons complex consolidation.

**Director – Environmental Restoration Division**

September 1987-September 1997

Started the cleanup program for LANL, SNL, Pantex, Kansas City, Mound, Pinellas and Rocky Flats for all aspects of cleanup including, characterization, NEPA compliance, environmental remediation, waste minimization, waste disposition, decontamination/decommissioning, risk analysis, value engineering, cost estimating and baseline development/review. Worked closely with the sites and the regulatory agencies in formulating cleanup agreements.

**Project Manager – Uranium Mill Tailings Remedial Action Project**

January 1985-September 1987

Served as the Project Manager for the \$1.9B project for the characterization and cleanup of 22 uranium mill sites and cleanup of 5000 residential and businesses. Conducted negotiations with the NRC, state agencies and other regulatory agencies on cleanup designs and schedules. Held numerous public meetings, public hearings and press conferences to communicate with the public on project plans.

**Resident Engineer – Major Projects Division**

January 1979-January 1985

Responsible for all construction activities including design reviews, configuration control, inspections, construction safety oversight, contractor cost/schedule performance analysis, quality assurance, product acceptance and turnover/startup of a major systems acquisition project (\$200M 1982 dollars) for the construction of a complex nuclear facility for storage and reprocessing of spent Navy reactor fuel for recovery of enriched uranium. The project was completed 6 months ahead of schedule and \$30M under budget.

**Engineering Intern**

January 1978-January 1979

Began my nuclear career on the New Waste Calcine Facility at the Idaho National Laboratory. The facility processed highly radioactive liquid waste into a calcine material for eventual disposition in a high-level waste repository. Served several rotational assignments with both DOE and the contractor on nuclear construction

**EDUCATION**

B.S. Civil Engineering, New Mexico State University, 1977

**NNSA Technical Qualifications Program** – Certified NNSA Senior Technical Safety Manager for 18 years

**Active DOE Q Clearance**