
Providing Solutions to the Department of Energy for More than 50 Years
Parsons has delivered services to the US Department of Energy (DOE) for more than 50 years, with support ranging from the design, construction, commissioning, and operation of one-of-a-kind facilities to process/store high-hazard waste to the development of the technologies needed to treat that waste. Our signature projects, outlined below, align with some of the DOE’s major research initiatives and highest-priority environmental cleanup efforts.

**Salt Waste Processing Facility**

Parsons is currently performing a multiyear contract to design, build, and operate for 1 year the Salt Waste Processing Facility (SWPF) at the Savannah River Site (SRS) in Aiken, SC. Parsons has provided technical services at the site for more than 25 years. SWPF is the first DOE large-scale production facility for treating high-hazard liquid salt waste in the United States. An 82,000-square-foot, multistory, high-hazard, nuclear-waste processing facility, SWPF will treat the liquid salt waste currently stored in 43 tanks at SRS. This technically difficult project involves rigorous DOE design requirements for first-of-a-kind, cost-effective, safe, and environmentally sound waste treatment. Construction was completed in the spring of 2016, 8 months ahead of the contract target schedule and more than $60 million under the contract target cost. Construction completion brings the facility one step closer to operations. The project was recently awarded a Secretarial Department of Energy Award.

**Glass Waste Storage Building #2**

Parsons developed the detailed design and provided project management and construction management services for the Glass Waste Storage Building #2 at the SRS. This facility provides long-term storage of extremely high-activity vitrified wastes and spent fuel. Parsons performed shielding and natural convective cooling analyses and reviewed vendor submittals. The project was awarded the Secretary of Energy’s Achievement Award for completing work under budget and ahead of schedule.

**Highly Enriched Uranium Materials Facility**

Parsons provided engineering and design services, construction cost estimating, and construction document packages for the construction of the Highly Enriched Uranium Materials Facility (HEUMF) at the National Security Complex (Y-12) in Oak Ridge, TN. The HEUMF is a 117,000-square-foot facility that was designed to consolidate long-term storage of excess weapons-grade uranium materials for the U.S. DOE Complex. Parsons provided preliminary and final design for the HEUMF under a rigorous schedule. We completed design milestones ahead of schedule while incorporating significant changes to the ventilation and security systems designs. The facility began operating in 2008.

**Enterprise Construction Management Services**

Under its current Enterprise Construction Management Services contract with the DOE/National Nuclear Security Administration (NNSA), Parsons is providing professional and technical services to support the planning and management of nuclear and nonnuclear projects across the NNSA enterprise. To date, Parsons has provided a broad range of services under this 5-year contract, including: serving as owner’s agent for the property transfer of the Bannister Federal Complex in Kansas City, MO; providing construction management (CM) and commissioning for the High Explosives Pressing Facility at the PANTEX Plant near Amarillo, TX; and supporting CM at the Y-12 Security Complex in Oakridge, TN. Parsons is providing independent analysis of alternatives (AoA) for numerous projects and CD-1 concept design packages for several others. Parsons has also supported NNSA’s international projects, providing construction inspection services in Moldova and Kazakhstan.
National Ignition Facility

Parsons partnered with the University of California and the DOE on the design and construction of the National Ignition Facility (NIF), in Livermore, CA. The facility, designed to house the world’s most powerful laser, focuses high-energy lasers on deuterium and tritium targets to cause fusion reactions and high-energy neutrons. Parsons developed the facility design and provided procurement and inspection and design configuration management services during construction. Technical challenges included the firing of hundreds of lasers simultaneously at sub-nano-second intervals, laser vibration isolation and dampening, remote replacement of laser lenses, neutron shielding, fusion product recovery/treatment, and precise temperature control.

Fermi National Accelerator Laboratory Projects

Parsons provided support to the Fermi National Accelerator Laboratory near Chicago, IL, through our contracts with Fermi Research Alliance. Fermi Laboratory conducts pioneering particle physics research and operates world-renowned particle accelerators and experiments. Parsons’ services included tunnel design and project/construction management.

International Linear Collider

Parsons supported the International Linear Collider (ILC) program at the DOE’s Fermi National Accelerator Laboratory, preparing several preconceptual design studies and cost estimates. This $10 billion program is an international collaboration to design and build an electron-positron particle accelerator that will expand the reach of particle physics research. The ILC facilities, together with the Large Hadron Collider, a proton-proton collider at CERN in Geneva, Switzerland, hold the promise of unlocking some of the deepest mysteries of the universe and enabling the exploration of unknown regions of science such as the composition of dark matter and other dimensions. Drawing on our extensive experience with one-of-a-kind science facilities, Parsons developed a cost model based on generic sites and prepared design studies for the ILC conventional facilities.

Company Overview

Founded in 1944, Parsons is an engineering, construction, technical, and professional services firm with revenues of $3.2 billion in 2015.

Parsons is a leader in many diversified markets with a focus on infrastructure, industrial, federal, and construction. Parsons delivers planning and programming, design/design-build, program/construction management, and other professional services packaged in innovative alternative delivery methods to federal, regional, and local government agencies, as well as to private industrial customers worldwide.

We conquer the toughest logistical and technical challenges and deliver landmark projects across the globe. Today, Parsons employees are engaged in projects in 29 countries around the world.