

National Nuclear Security Administration (NNSA)

# National Security Campus



When the National Nuclear Security Administration (NNSA) decided to develop a new site with multiple facilities, SSOE was enlisted to lead design efforts for all Mechanical, Electrical, Plumbing (MEP) and structural systems. With a large multidisciplinary team in place and innovative use of 3D BIM design, SSOE proved to be an integral engineering services provider.

Mandated by Kansas City's Responsive Infrastructure, Manufacturing and Sourcing (KCRIMS) transformation plan, the project was implemented to protect some of the nation's most premier security assets. The new complex will incorporate five buildings featuring manufacturing spaces, laboratories, office spaces, and warehouses. SSOE led all MEP and structural design efforts for all campus buildings and provided structural and MEP design for a central utility plant, which included a chilled water system, cooling tower system, hot water boiler system, and compressed air system. SSOE's scope also included electrical design of medium and low voltage power, lighting, auxiliary, grounding, and out building systems.

The new campus, which manufactures non-nuclear mechanical, electronic, and engineered materials for national defense systems, was developed to replace outdated facilities. SSOE's efforts enabled the client to upgrade from an outdated complex into a 21st century Nuclear Security Enterprise.

SSOE followed sustainable design principles in an effort to reduce environmental waste, maintenance, and energy costs. The efforts from the design team and their consultants will result in saving the client more than \$100 million each year and qualified the project for LEED® Gold certification.

## value promise

SSOE's efforts, along with other design consultants, will save \$100 million per year through sustainable features.

**size** 1.5 million SF; 186-acre site

**location** Kansas City, Missouri

## highlights

"Built to Suit" campus

National security

LEED® Gold certifiable

Compliant with EPA Act 2005, EISA 2007, and EO 13423 and 13514

Design utilizing Revit 3D BIM