Fort Knox

Energy Resilience Planning

Achieving Resilience

For 60 years, Fort Knox located in Kentucky was the home of the U.S. Army Armor Center and was used by the Army and Marine Corps to train crews on the American tanks of the day. Today, new facilities have been under construction, including its largest project to date, the new Army Human Resource Center. This $185 million, three-story, 880,000 square foot complex consists of six interconnected buildings sitting on 104 acres. The new center employs nearly 4,300 soldiers and civilians.

SEA provides the Army with ongoing energy services and REM support at 17 Army and Army Reserve facilities, including Fort Knox. Assisting clients in planning for secure access to energy and water resources is crucial to preserve choices in a rapidly changing world. SEA's REM assisted the Fort Knox Energy Team in the successful testing of a multi-million dollar backup power system to plan and be prepared for a more self-sustaining, resilient base. The $62 million program allows the total installation to operate off-grid without the help of outside utility providers. The program will save about $10 million a year and can provide necessary water and energy for mission critical facilities for up to 14 days.

Fresh off a streak of awards that has put Fort Knox in an envious position across the U.S. Army, officials of the Directorate of Public Works say they have no plans to slow down. With resilience as their focal point, Fort Knox is positioning to take the next few steps necessary for complete and endless energy independence if faced with disaster.

Fort Knox's Energy Program Achieves Resilience Toward Independence.

880k
Square Feet

14
Days Off-Grid Achieved

10M
Annual Savings

6
Buildings

Next Steps

The Energy Program has divided its efforts into three strategies: electric, gas and water. Water is a more long-range focus even though water consumption has already been reduced by 70% just by fixing leaks. Right now, the team is focused on making electric and gas energies more efficient and effective. Because gas is used to generate the electricity, the overall gas consumption has flattened particularly because of the climate in Kentucky. The focus now is to determine how to buy gas at its cheapest cost and store it onsite to have the ability to eliminate higher costs during intermediate and peak hours of use.

The need to be compliant with the U.S. Army's directive for energy resilience is no longer a concern for the installation because the Army goal to remain energy independent for up to 14 straight days has been achieved and even exceeded. Instead, they are looking to shape the future of energy resilience throughout the Department of Defense with the help of SEA's REM.

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