



FORT HOOD, TEXAS SOLAR & WIND ENERGY PROJECT

PROVIDES ONSITE & OFFSITE GENERATION, SUPPLY DIVERSITY & MICROGRID COMPATIBILITY

Energy resilience is critical to Army Readiness. The homeland is no longer a sanctuary.¹ The Army is modernizing its installations with energy solutions that are resilient, efficient, and affordable.

The U.S. Army Office of Energy Initiatives (OEI), Fort Hood, and the Defense Logistics Agency (DLA) Energy collaborated with Apex Clean Energy Holdings, LLC to develop a 65 megawatt (MW) alternating current (AC) combined solar and wind project at Fort Hood, Texas. It is the Army's first hybrid renewable energy project, and first to include both on and off installation generation. In April 2017, the project became fully operational, bringing onsite and offsite generation, supply diversity, and microgrid compatibility.

About Fort Hood

Fort Hood is the largest active duty armored post in the U.S. Armed Forces. There are nearly 40,000 Soldiers who work on Fort Hood.

Fort Hood has come a long way during its more than 75 years – from rolling Central Texas farmlands to the Army's premier training facility of today's Soldiers – and that growth continues. Fort Hood is located in southwestern Bell and southeastern Coryell counties in Central Texas. Most of the 218,000 acres owned by the U.S. Army is located in Coryell County. On January 14, 1942, at the beginning of U.S. involvement in World War II, it was announced that a tank destroyer tactical and firing center would be established near Killeen, Texas.

The Soldiers of Fort Hood are infantrymen, cavalrymen, and tankers. They are engineers, mechanics, and health care professionals. They are the life of Fort Hood. Their training gives Fort Hood its purpose, just as Camp Hood troops did back in 1942. They are part of what has made Fort Hood the "Great Place" for more than seven decades.

Project Details

- This project is the Army's first hybrid solar and wind energy project and the first to include both on and off installation generation, leading the way in sustainability.
- The project has a capacity of approximately 65 MW AC, enough to power about 21,000 homes.
- The onsite solar array generates approximately 15 MW AC.²
- Energy purchased from the onsite solar system is combined with energy from the approximately 50 MW AC offsite wind facility.
- The project contributes to the Army's energy resilience through diversification of supply and helps combat the increasing threat of outages caused by weather events or other disruptions.
- The solar project on Fort Hood is also microgrid compatible to enhance energy security.
- The project has a dedicated behind-the-meter solar generating asset and offsite dedicated wind-generating asset.
- The project provided approximately 440 jobs during construction and 10 full time positions during operations.

1st Battalion, 5th Cavalry Regiment at Fort Hood in a battalion force-on-force training exercise.



About Army Office of Energy Initiatives

The Army OEI seeks to assist Army installations in optimizing operations, meeting mission essential requirements, mitigating vulnerabilities, and sustaining critical capabilities during any energy disruption. The Army OEI is aligned under the Assistant Secretary of the Army for Installations, Energy and Environment and the Deputy Assistant Secretary of the Army for Energy and Sustainability. The Army OEI serves as the Army's central program management office for the development, implementation, and oversight of privately financed, large-scale, energy projects focused on enhancing energy resilience, energy security, and sustainability on Army installations. Army OEI collaborates with industry, public utilities, and other stakeholders to implement projects using alternate resourcing strategies that provide energy generation, storage, and control capabilities. These "islandable" capabilities can support critical operations in the event of a grid outage, enabling the Army to achieve the levels of mobility and lethality to maintain its tactical and strategic edge. For more information about Army OEI, visit: www.oei.army.mil.



50 MW Offsite Wind Facility in Floyd County, TX



15 MW Onsite Solar Array at Fort Hood, TX

About Defense Logistics Agency Energy

For more than 70 years, Defense Logistics Agency (DLA) Energy has provided the Department of Defense and other government agencies with comprehensive energy solutions in the most effective and efficient manner possible. DLA Energy is a primary-level field activity of the Defense Logistics Agency, and is co-located at Fort Belvoir, Virginia. DLA Energy is one of OEI's acquisition partners supporting large-scale renewable and alternative energy projects.

About Apex Clean Energy

Apex Clean Energy Holdings, LLC is an independent renewable energy company focused on building utility-scale generation facilities. Apex creates value throughout the asset life cycle, from site origination and financing, to turn-key construction and long-term asset management. Their business plan is based on the premise that clean energy resources are valuable. Like conventional energy companies, Apex secures rights to these resources and invests to commercialize them.

¹ 2018 National Defense Strategy

² Alternating Current (AC) is provided to consumers. Inverters convert the direct current (DC) from solar panels to AC and losses occur during conversion. Approximately 18 MW DC = approximately 15 MW AC.

