



# OKLAHOMA ENERGY RELIABILITY AND RESILIENCE PROJECT

## U.S. ARMY GARRISON FORT SILL

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

The Army Office of Energy Initiatives (OEI), Fort Sill, Public Service Company of Oklahoma (PSO), a subsidiary of American Electric Power, and the U.S. Army Corps of Engineers (USACE), are collaborating on the development of an energy reliability and resilience project to be built on Fort Sill, Oklahoma. In October 2020, PSO filed with the Oklahoma Corporation Commission (OCC) for regulatory review and approval to proceed with the project. If approved, construction is projected to begin in 2021.

On June 5, 2020, the Army signed a lease with PSO that grants 81 acres of installation land to construct, own, operate, and maintain a 36 megawatt (MW) natural gas-fired Reciprocating Internal Combustion Engine (RICE) power plant and an up to 11 MW solar array, subject to OCC approval.

During normal grid operations, the project would benefit the community by increasing grid reliability and providing power to local PSO customers. In the event of a regional grid outage, the project would enhance energy resilience by providing "islandable" capability to power Fort Sill's critical missions for at least 14 days.

### About U.S. Army Garrison Fort Sill

Fort Sill is a hub of Joint and multinational partnered training. It covers almost 94,000 acres, including more than 80,000 acres of training land. Fort Sill contributed \$4.1 billion to the state's economy in FY 2010 according to an Oklahoma Department of Commerce estimate. Fort Sill is home of the Fires Center of Excellence which educates, trains, and inspires FIRES Soldiers and Leaders and develops requisite capabilities to ensure current and future FIRES forces can accomplish their missions, while providing unparalleled support to the Fort Sill Community. Fires Strong!

Fort Sill is designated as a National Historic Landmark and serves as home of the U.S. Army Field Artillery School as well as the Marine Corps' site for Field Artillery Military Occupational Specialties school, U.S. Army Air Defense Artillery School, the 31st Air Defense Artillery Brigade, and the 75th Field Artillery Brigade. Fort Sill is also one of the four locations for Army Basic Combat Training. It has played a significant role in every major American conflict since 1869.

Fort Sill is "Fires Strong!"



### Project Details

- This project is an example of how collaboration can benefit Army readiness and the community.
- As conceived, the project would provide "self-start" capability, onsite generation, and supply diversity via 36 MW natural gas-fired power generators and an up to 11 MW solar array, and switchgear.
- During normal operations, the utility-owned project would serve the community by increasing grid reliability and providing power to local PSO customers.
- During a regional grid outage, the project would enhance energy resilience by providing 100% of the power needed to sustain Fort Sill's critical missions for at least 14 days.
- The proposed project is supported by a 30-year lease term with an option to extend for 10 additional years, under statutory authority 10 USC §2667, for 81 acres on Fort Sill.
- As in-kind consideration for the lease value, the Army would have first right to the plant's power in the event of a regional grid outage.
- PSO would construct, own, operate, and maintain the project.
- In October 2020, PSO filed with the OCC. If approved, construction is projected to begin in 2021.



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## 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](http://www.oei.army.mil).

## About Public Service Company of Oklahoma / American Electric Power

Public Service Company of Oklahoma (PSO) is comprised of more than 1,600 Oklahomans and has been providing power to the Oklahoma communities they serve for more than a century.

PSO is an American Electric Power (AEP) company, with a focus on using new technologies to build a more efficient energy infrastructure. For more information, visit: <https://www.psoklahoma.com>.

## About U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) has approximately 37,000 dedicated Civilians and Soldiers delivering engineering services to customers in more than 130 countries worldwide. USACE's mission is to deliver vital public and military engineering services; partnering in peace and war to strengthen our Nation's security, energize the economy and reduce risks from disasters, and with a vision of engineering solutions for our Nation's toughest challenges.



Artist Rendering Provided by PSO



Notional

<sup>1</sup> 2018 National Defense Strategy

