Amended Direct Exhibit JM-4 of Jonathon Monken (SREA Exhibit 5)

State of Georgia - DoD Energy Fact Sheet

DoD's mission assurance is only as strong as its supporting electric infrastructure.

1. **Critical infrastructure is an extension of the weapons system platform.** This includes utility owned and operated systems, projects, and assets.
2. **Defense communities are part of mission capability.** An estimated 60% of military personnel live in the communities that surround military bases along with interdependent infrastructure systems such as water/wastewater, transportation and communications.
3. **DoD energy resilience risk is regional in nature.** State-wide planning is needed for Georgia's utility to meet the needs of national defense customers. Existing Memorandums of Understanding and Distributed Energy Resource plans do not contain such plans or information.

National defense hinges on the effectiveness of stateside operations, within buildings and infrastructure systems that all rely on one shared necessity to operate: ***reliable power from the utility grid.***

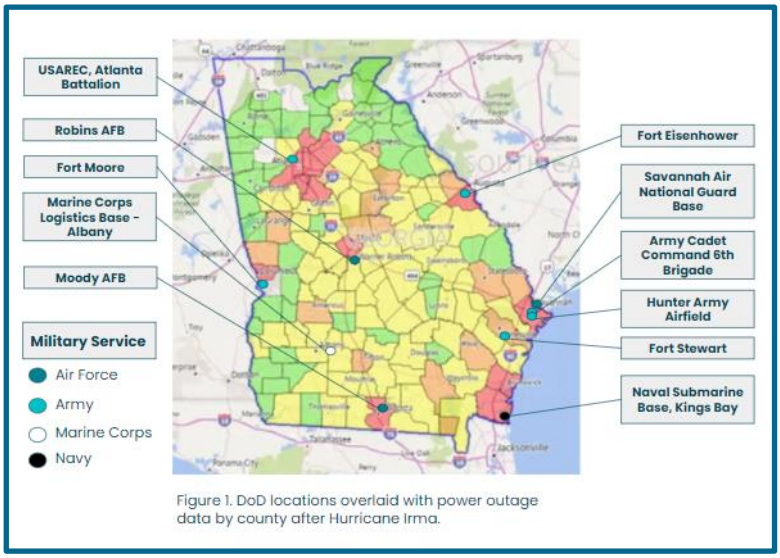


Figure 1. DoD locations overlaid with power outage data by county after Hurricane Irma.

Georgia's installations each play a uniquely critical role in protecting the country, and often require, to varying degrees, uninterrupted electricity service to operate their missions.

Fort Moore houses or supports over 120,000 active-duty personnel. It is considered a power projection platform, meaning it stands ready to deploy combat-ready troops by land and air.

Fort Stewart is the largest Army installation east of the Mississippi River. Fort Stewart's dynamic platform allows military units in the region to deploy rapidly throughout the world.

Additionally, Fort Eisenhower is home to the Army's Cyber Command and trains the most troops of any other U.S. installation.

Warner Robins Air Force Base (Air Force) is the largest industrial complex in Georgia. The base covers more than 6,934 acres, including Georgia's largest runway. The runway is 12,000 feet long by 300 feet wide with two 1,000 foot overruns. The Warner Robins Air Logistics Center, the host unit at Robins Air Force Base along with the 78th Air Base Wing and more than 60 other units, and known for providing combat superiority, readiness, and sustainability to the Air Force.

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The Department of Defense is one of Georgia Power's largest customers, and Georgia's defense economy is foundational to the state's broader economy and promotion of public good.

In fiscal year 2022, Georgia's economy benefited from $6.0B in contract spending, $7.2B in personnel spending responsible for 124,079 direct jobs as a result of its military installations. Defense spending makes up 1.8% of Georgia's GDP (OLDCC Data).

On-base limitations exist for military locations in the state, and they need Georgia Power's planning to include projects designed to meet energy requirements for critical national defense missions.

Missile fields, cyber operations facilities, and satellite control facilities, for example, must attain a minimum level of 99.9999% availability regardless of their source of primary power. While many DoD facilities are supported by back-up generators, the reliability of these generators is insufficient to meet these requirements as a stand alone solution.

The Air Force's critical mission requirement is seven days of assured power, and the Navy and Army have each established 14-day requirements for uninterruptible power in support of critical missions.

The DoD is required by law to produce or procure 25% of its electricity consumption from renewable energy sources by 2025. Executive Order 14057 from 2021 also requires federal agencies to achieve 100% carbon-free electricity by 2030. Although DoD has set targets for installation resilience, these targets have not yet been achieved, and installations remain vulnerable to grid outages. In particular, transmission outages pose the risk of lasting beyond DoD's 14-day energy resilience planning horizon, as summarized in a recent report by the National Renewable Energy Laboratory (NREL) which states, "The Department of Defense realized the current electrical configuration was a vulnerability and tasked the NREL to study the effectiveness of backup power systems used on DoD sites. The study discovered well-maintained generators have a reliability of 80 percent after two weeks of run time. Based on this information, the study determined a single, well-maintained emergency generator cannot guarantee emergency power for critical loads over multi day outages." (Source)

Southern Company and DoD each have ambitious clean energy goals. The MOU provides a springboard for both entities to achieve these goals, but committed execution is needed for this vision to become a reality.

Joint Planning. Southern Company coordinating their IRP request with DoD to incorporate carbon free generation. This will help Southern Company and DoD achieve their respective clean energy goals.

Resource Integration. Southern Company prioritizing the responsible integration of carbon free generation, or opening interregional transmission avenues to allow the procurement of clean energy.

Expanded Access. Supporting multiple DoD contracting pathways for securing energy needs.

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DoD Efforts to Support Their Energy Assurance Needs

The DoD has invested in the following energy projects on military bases in Georgia through their Congressionally-appropriated Energy Resilience and Conservation Investment Program:

- Fiscal Year 2024
  - Naval Submarine Base Kings Bay, Electrical Transmission and Distribution Improvements for Energy Resilience, $49,500,000.
- Fiscal Year 2023
  - Fort Stewart-Hunter Army Airfield, Power Generation and Microgrid for Energy Resilience, $25,400,000.
  - Naval Submarine Base Kings Bay, Navy SCADA Modernization for Energy Resilience, $11,200,000.
- Fiscal Year 2022
  - Fort Moore, Construct 4.8MW Generation and Microgrid, $17,593,000.
  - Fort Stewart, 10 MW Generation Plant with Microgrid Controls, $22,000,000.
  - Navy Naval Submarine Kings Bay, Electrical Transmission and Distribution, $19,314,000.

The DoD has conducted a black start exercise at Fort Stewart and Energy Resilience Assessments at Dobbin AFB and Naval Submarine Base Kings Bay (Source).

Existing Energy Resources Located on DoD Installations

- Army Ft. Moore, Ft. Eisenhower, Ft. Stewart, GA, 90 MW solar (Source)
- Fort Hunter and Stewart installed 160 kWh rooftop solar (Source) and 30 MW of solar PV (Source)
- Moody AFB installed a 2.5 MW solar array (Source)
- Robbins AFC 139 MW solar project (Source)
- MCLB Albany is the first Marine Base to be net-zero (8.5MW biomass steam turbine) (Source)
- Naval Submarine Base, Kings Bay has 30 MW of solar up online (Source) and was recently awarded funding for an additional 6 MW (Source)

Southern Company Commitments

Memorandum of Understanding Between The U.S. General Services Administration and Southern Company Services: "Subject to the Southern Operating Companies' respective resource planning and operation obligations, the construction and/or acquisition of the renewable and CFE resources needed to generate additional electricity and associated Renewable Energy Credits which, in conjunction with Southern Operating Companies' existing and future nuclear, hydroelectric or other CFE resources would result in Federal Government operations using electricity that is 100% attributable to CFE resources by 2030."