Energy Resilience for DoD Domestic Installations

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• Backup generators supply critical loads at the building/low voltage level
  – Large bases can have 50-100 individual backup generators
  – Typically 1-3 days of fuel is stored on-site

• Existing energy security solutions are poorly integrated both across the installation and with the larger grid
A DoD installation microgrid is a more effective solution to large-scale power grid disruptions

- Onsite cogeneration and PV at below market prices with third party financing
- Energy storage with some costs offset by participating in the ancillary services market
- Advanced controls in a cyber secure environment
Methods for Scaling Up

**Problem:** Appropriated funding is limited to significantly fund new energy security solutions at domestic installations

**Potential Solution:** Use the existing financing vehicles (ESPC*, UESC*, etc.,) to combine high return efficiency improvements with more advanced energy security solutions

- Entire suite of improvements must be life cycle cost effective within existing authorities
- Potential to include renewable generation and/or local co-generation

* ESPC – Energy Saving Performance Contract
* UESC – Utility Energy Savings Contract

Requires a champion at both the installation and Service level