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# Energy Resilience for DoD Domestic Installations

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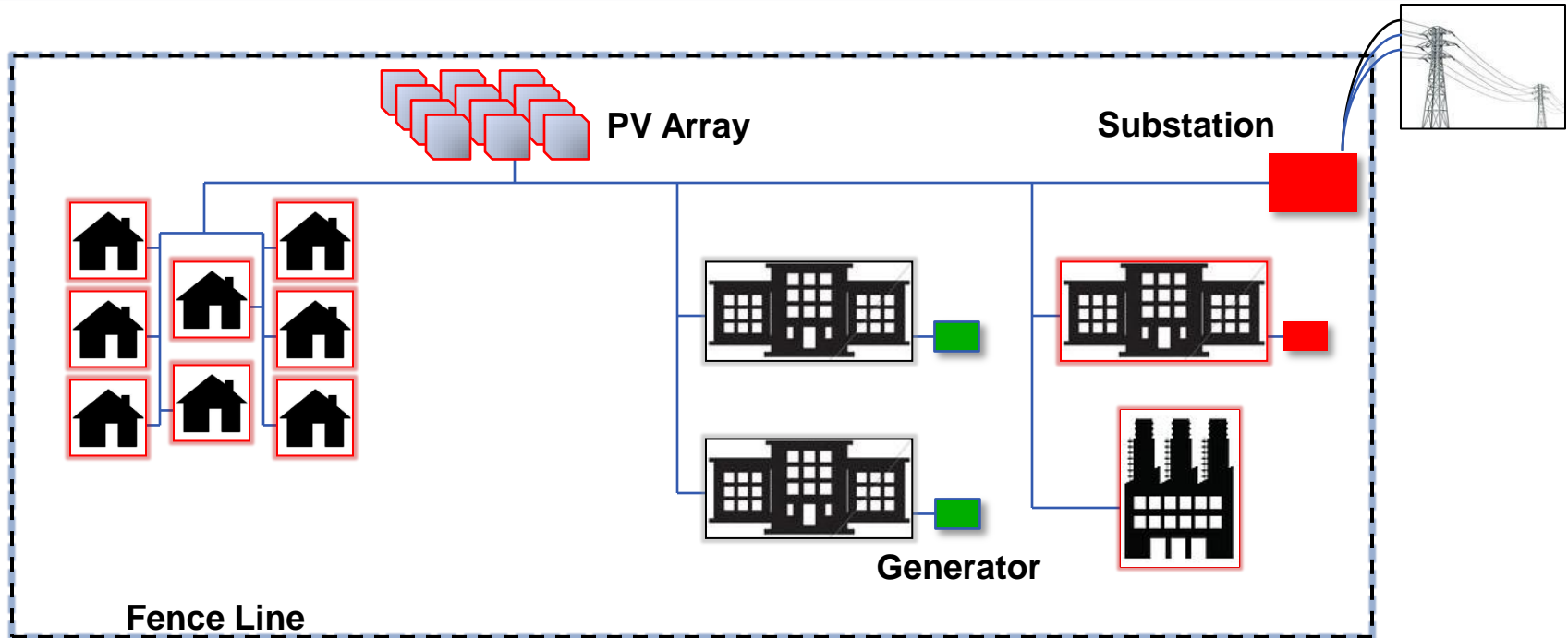


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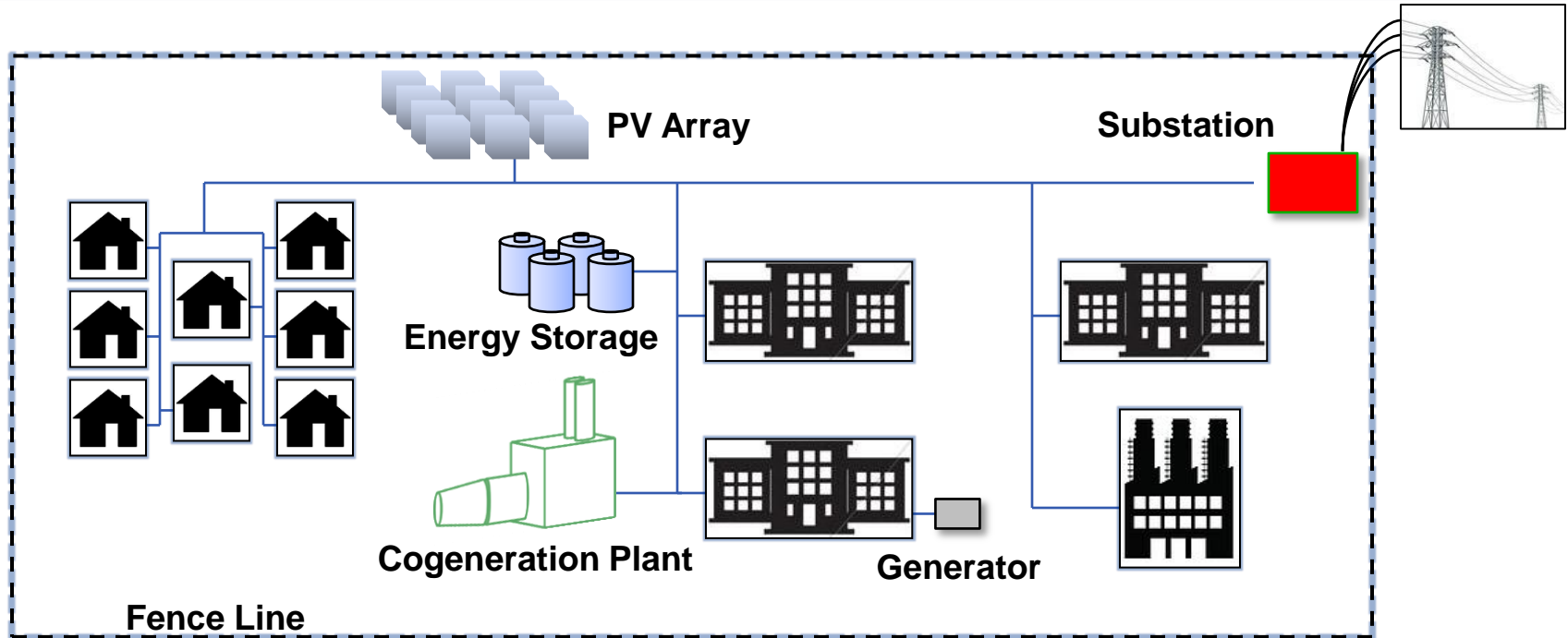
# Current State of DoD Power Infrastructure



- **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**



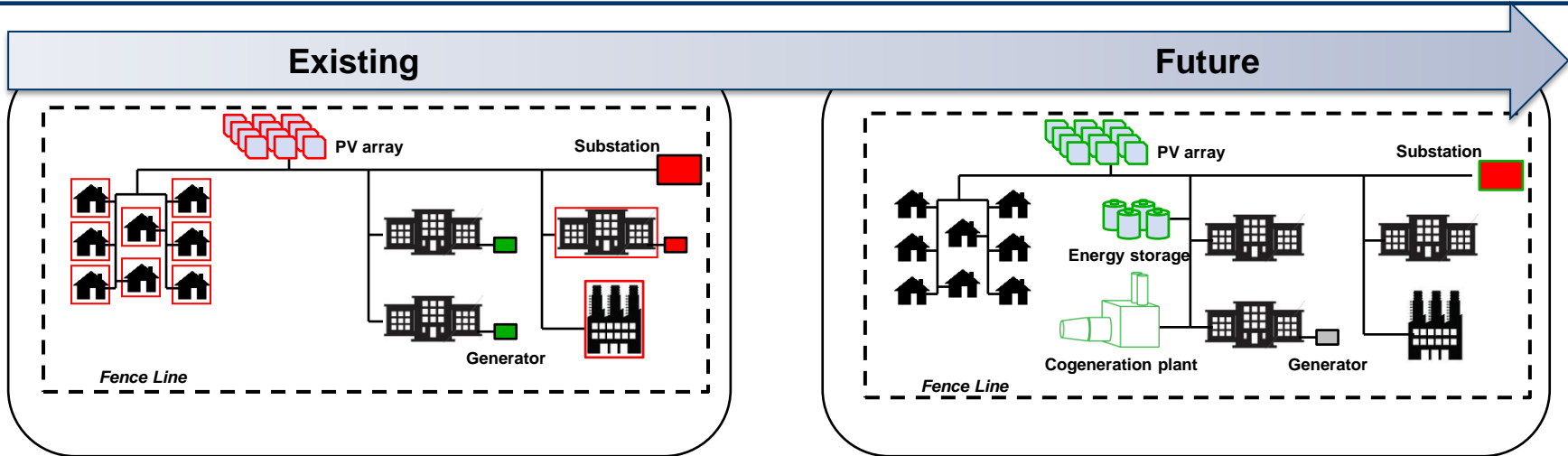
# Where We Need to Go



- **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**