Generator System Configurations
Typical Back-up Generator Configuration

Generator is sized to power the entire facility.
Emergency Loads Only

Generator is sized to power only the lab (or emergency) loads.
Add Inverter / Batteries

Generator is sized to power the lab loads plus the battery charging loads.
Add other Emergency Loads

Generator is sized to power the lab loads, battery charging loads and other emergency loads.
Whole facility generator, plus the inverter / batteries.

Generator is sized to power the entire building plus the charging load.
Generators are sold as either Primary Power or Standby Power.

From Cap Hatien Deputy Office.
Stand-By vs. Primary Power

- **Primary Power Generators**
  - Typically designed to run for 12 to 18 hours / day at 75% of full load. (manufacturers vary)

- **Standby Power Generators**
  - Typically designed to run only a few hours/day at 50% to 75% of full load

- **Primary power Rating** is often about 80% of the Stand-by Power Rating.

- Purchasing a standby generator and using it in a Primary power application can have negative results.