

Things to Consider

Cogeneration (CHP) Generators

For CHP generator sets to be economically feasible there must be a nearby use for the heat rejected by the engine.

CHP works best when the kWe produced by the generator and the demand for heat from the engine (kWt) are both used to their maximum output. Often a good system will be limited by the electrical or heat load. For example, if you require 200 kWt of heat energy and 600 kWe of electrical energy, the most effective system may be to provide 200 kWt and (about) 175 kWe. The balance of the electrical load would remain on the grid.

The following is a list of some of the things that you need to consider for a CHP generator set.

- What is the voltage, frequency, kWe, kWt?
- Where will the heat be used (i.e., what is the distance)?
- How will the heat be be used?
- Where will the CHP generator set be located—indoors or outdoors?
- What noise (i.e., sound pressure) levels are acceptable?
- What are you paying in electrical utility costs?
- What are you paying in heat energy costs?
- What fuel source is available?
- What is the cost of fuel?
- Can your fuel costs be improved or locked in by contract?
- What are the access restrictions (e.g., size or weight restrictions especially in buildings)?

There's lots more to consider.