



Generators: To Buy or Not to Buy?

Dependant on the specific needs of your organization, back-up electrical power may be critical in the development of your Business Continuity Planning. Once you have identified your essential functions in your business continuity plan and realize that those functions require electricity to maintain operability, you will want to explore the options for back-up electrical power.

Below are a few questions that will help guide the kind of generator you will need to support your organization in an emergency situation and the process for obtaining one.

- What are the essential functions of your organization (should correlate with those listed in your *Business Continuity Plan*)? Do these require electricity?
 - Only computers? A server? A large refrigerator? Power in a warehouse?
 - Will these functions be critical in an emergency situation?
 - Can we operate successfully without electricity?
- What is the current usage of electricity for my organization?
 - Check your electrical bill and track usage 3 months back.
- Can we operate successfully without electricity until power is restored?

The previous questions will determine if a generator is essential to your operations and, if so, the size of the generator you will need and how large of a project you may take on.

What you ultimately source for your organization will depend on what functions you are looking to continue and what parts of those functions require electricity. Since you are planning for multiple days without electricity, you will also want to consider a slightly larger (~15-20% more) capacity than your needs.

Approximate Wattage

- 1 computer → 250 watts
- 1- 20 Cubic Ft. Refrigerator → 800 watts
- Air Conditioning (2 tons) → 3000 watts
- 12,000 sq ft office building → 75kw
- 12,000 sq ft office building/ warehouse → 100kw



For a small generator:

- Designate someone within your organization as the lead for this project
 - i.e. Director of Operations
- Consult with a contractor or electrician as to what generator would best suit your essential functions
 - Perhaps a portable generator
- The generator may be sourced from a home improvement store or from a specialized vendor
- For smaller portable generators you will need to also think of the following:
 - Where will you store the generator?
 - Who will do the powers transfer to the generator?
 - How will you store and obtain fuel for the generator?

For a large generator:

- Designate someone within your organization as the lead for this project
 - i.e. Director of Operations
- Hire a project manager, *obtain a few quotes* before choosing your PM
 - PM can be a contractor with generator expertise or electrical contractor which specializes in generator turnkey installations and also may offer service maintenance contracts
 - If someone on your staff has this particular expertise you may be able to have them guide the project
- PM should be able to direct the needs (with your guidance) of the overall project to include:
 - Generator sizing, sourcing and placement (Confirmation of load study done to establish sizing for generator and to determine if fuel source is adequate)
 - Generator Mobility (on a mobile platform or a permanent fixture)
 - Recommendation of fuel option (diesel, natural gas, propane?)
 - Electrical plans drawn (for permitting) Plans to possible include natural gas or propane connections
 - Construction plans drawn (concrete base, (de)construction of facility to incorporate generator- i.e staircase removal) (for permitting)
 - Sound requirements for permitting (sound walls?)
 - Emission of fumes assessment (APCD to be involved with diesel engines)
 - Property line restrictions and setbacks
 - Obtainment of permits from jurisdiction (County? City? Other governing boards?)

Should you have additional questions please feel free to contact
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