



Generator Requirements for Horse Farms

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How much water does a horse need to drink a day to maintain hydration?

Most horses require 1 gallon per 100 pounds of body weight. An average 1,000 pound horse would require a minimum of 10 gallons of water a day. This value can increase easily to 20 gallons a day for an adult horse if the weather is extremely hot, if the horse is exercising, or if it is a mare that is producing milk.

Many Florida horse farms ran out of water during the 2004 hurricane season due to the prolonged power outages following the storms. Surprisingly many farms did not have a back up power supply to run their wells. County officials worked with area horse farms to supply them with water through the local fire departments. Some farms did not have power for over two weeks underscoring the need for farms to be self-sufficient.

If you have not purchased a generator to run your well now is the time. First you must contact your local well company or electrician to set up the proper electrical connection. It is easy to destroy the motor of your well if you do not use the appropriate size generator.

How do you know what size generator you need to run your well pump?

Generators must be sized to deliver at least 65% of the rated voltage during motor starting to ensure adequate motor starting torque. Many horse farms will have at least a 1 hp well requiring a 4 KW or 4,000 watt generator.

Well Motor HP	Minimum Rating of Generator (KW)
1/3	1.5
1/2	2.0
3/4	3.0
1	4.0
1 1/2	5.0
2	7.5
3	10.0
5	15.0

* From Franklin Electric Motor Guide for Submersible Motors

Generator operation: Always start the generator first before starting the well motor. Always stop the well motor before turning off the generator. The motor thrust bearing can be damaged when the generator is turned off first or allowed to run out of fuel.