Three-Phase Electrical Power For The Dairy Farm

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Do you have three-phase electrical power available at your dairy farm? If so, are you taking advantage of all the benefits of three-phase power? If you don't have three-phase power available, have you checked with your local utility company recently to inquire about the requirements to get three-phase power for your tarm?

As dairy farms become larger and more mechanized, there is an increasing need for larger electric motors. Three-phase electrical power needs to be considered on all dairy farms, especially if you are planning for any renovations or expansions.

The benefits of three-phase power include:

• Three-phase motors cause little or no voltage flicker from motor starting.

• Three-phase motors cost considerably less (20-50 percent less) than comparable single-phase motors.

• Three-phase motors have longer useful lives than single-phase motors.



• Three-phase motors are available in a much larger range of horsepower sizes.

The disadvantages of three-phase power are:

• Three-phase motors are not necessarily more efficient than single-phase motors.

• Three-phase power may mean that commercial rates (rather than residential rates) will be charged for your electricity usage and that demand charges will be assessed. Therefore, three-phase power may cost more than single-phase power, depending on your local utility company and also your electricity generation supplier.

How can you get three-phase power? You must check with your local utility company to inquire where the nearest three-phase service is available and get a cost estimate of providing the service to your farm. Also find out whether you will be charged residential or commercial rates for the electricity used on the farm. In most cases, the answer will be that you will be charged a commercial rate, but don't let that answer discourage you. In this era of deregulated electricity, you may find that the benefits of three-phase power offset the higher cost per kilowatt-hour for the electricity.

Be prepared to negotiate with your local utility company on the issue of three-phase power. I know one farmer who needed three-phase power because he was

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