



Power Factor Correction, what is it and why should I care?

Don't pay charges you can avoid, get to know your BC Hydro bill.

If your equipment is drawing too much reactive power, it's costing you!

If the finer points of electrical service are not your forte, there's a line on your BC Hydro bill you may be skipping over.

It's the **Power Factor Surcharge** and, as an easy way to save money and help protect our environment, definitely worth a closer look.

Active power vs. reactive power: what are you using?

Like all modern power utilities, BC Hydro supplies two different kinds of power:

- **Active power** (measured in kW), which is used by all types of electrical equipment to deliver required work, and
- **Reactive power** (measured in kVAr), which is only required by certain types of equipment, such as those that produce motion (for example, motors) and those containing electronics (from computers to fluorescent lights with electronic ballasts).

The trouble starts when your equipment draws too much reactive energy from the grid. This causes inefficiencies in the transmission system, like waves in a tub that crash into each other instead of moving smoothly together. The greater your inefficiencies, the more you pay.

This is where the Pro Series Power Factor Correction Unit (PFCU) can help!

By correcting your power factor you save not only on power bills but also reduce the amount of heat and stress on your electrical equipment, things like elevators, computers, motors, drivers, servos, light ballasts, LED components and more.

Luckily, it's easy to reduce power factor surcharges. In most situations the key is simply to install one or more PFCUs, either at the point where your equipment is using reactive energy or where the electricity is delivered to your overall operation.

In one case, a greenhouse facility in Abbotsford is **now saving \$1200 per month in penalties** after installing one of our Pro Series power factor correction units.



How would you feel paying \$1200 more than you had to every month, say for the next 10 years? Power prices aren't coming down anytime soon.

Do the math! That's \$288,000.00 in unnecessary penalties!

"If you're paying a power factor penalty, you certainly don't need to," says Keith Persaud, Operations Manager at P3Connect. "The payback for fixing it can be as fast as 12 months with all kinds of payment options to choose from."

How can you determine if your business or facility has a poor power factor?

Energy companies often include power factor related details on their monthly power bills. Otherwise we can help. P3 connect will request the raw data from your provider and perform an assessment for you - free of charge! Get good systems advice from your P3Connect team.

Billing Scale for bad power factor

<u>Power Factor</u>	<u>Penalty on all Charges</u>
90% +	NIL
88 - 90%	2%
85 - 88%	4%
80 - 85%	9%
75 - 80%	16%
70 - 75%	24%
65 - 70%	34%
60 - 65%	44%
55 - 60%	57%
50 - 55%	72%
50 -	80%

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