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Commentary ~ Patti Bauer

Why You Should Change Your Power Consumption

Many of us believe that BC Hydro is one of the cleanest and greenest public utilities in the world. How then is our electricity use contributing to greenhouse gas (GHG) emissions?

BC Hydro's current supply of hydroelectric power is fairly green, despite some environmental problems. The hydroelectricity dams are a great way to 'store electricity.' The dams allow BC Hydro's trading arm PowerEx to export hydropower into the North American grid during the day when prices are high. And at night, when prices are cheap, buy back 'dirty' electricity, produced by greenhouse-gas-rich methods—generated mainly by burning coal or natural gas. This practice integrates our electricity into the North American grid and means that every kWh we save reduces the amount of fossil fuel burnt to generate electricity.

In addition, BC Hydro has been a net importer of power for the last five years to meet our growing demand. In the Gulf Islands most homes have electric heat and hot water. Per capita we use 20% more electricity than 10 years ago—another reason to reduce our power consumption.

Demand for power is temperature sensitive and Vancouver Island recently reached an all-time peak demand. By reducing our electricity use at peak times of day during the fall and winter-mornings between 7 and 9 am and evenings between 5 and 7:30 pm, we reduce BC Hydro's need to purchase fossil fuel generated power to meet peak demand. We can do our power hungry tasks such as laundry and taking showers during off peak hours.

Metering & Off Peak Billing

Do we need 'smart' meters in our home that tells us what our usage is? They are available for under \$200 and will likely save \$100 or more per year in an average home. Do we need electronic reminders to tell us to turn our water tank temperatures down when we go away for a few days? Or do we read it right here and make the changes now.

BC Hydro's Conservation Research Initiative in Campbell River bills residents based on time-of-day usage. People pay

less for their power during off-peak hours. We could take more responsibility and do it ourselves. We know we need to conserve during peak hours to eliminate the need to purchase fossil fuel generated electricity.

Net Metering Program An Incentive to 'Generate Yer Own'

Energy security is another important factor. Severe weather events, symptomatic of climate change, have already caused power outages across the province and have shown us that BC Hydro cannot always be counted on to meet our power needs.

Producing our own power from local renewable sources is the lead we could be taking. Under BC Hydro's net metering program any household producing 50 kWh or less can sell their excess power to BC Hydro. BC Hydro will install free of charge a net meter and purchase our excess power, at a rate of 5.4 cents/kWh (Residents pay approx 6.7 cents/kWh).

If we are planning home renovations, there are big opportunities to reduce energy use, and grants are available to help us do it.

Strange Quirks Can Help & Hinder

Over time, BC Hydro's production capacity will change with the impacts of climate change.

The huge torrents of rain last fall filled reservoirs enabling hydro generators to produce at full capacity. As snow pack declines, so may the generators' ability to produce. On Vancouver Island, lack of precipitation to fill reservoirs could result in the need to buy power from fossil fuel sources, unless new renewable energy comes on stream. Local renewable energy strategies also lead to energy security.

Commercial Green Power Certificates

Last on the list of strategies to reduce our electricity GHG emissions are Green Power Certificates, GPCs, for commercial customers. Each GPC is worth 1 megawatt-hour (1,000 kWh) of green power. The purchase price of a GPC is \$15/MWH with a minimum purchase of 30MWH equating to \$450 per annum.

With 30 GPCs, a business could claim to be avoiding 10.8

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tonnes of greenhouse gas emissions (GHGs), equivalent to taking three cars off the road per year. BC Hydro is currently purchasing the full capacity of EcoLogo certified BC Independent Power Producers. The inventory under the program is not fully subscribed; in fact only 10% of the power supplied under this program has been purchased through GPC certificates so far.

BC Hydro is under contract to purchase all production from these suppliers for 25 years. With the intention of increasing the demand for green power, a business is effectively purchasing 'bragging rights.' Other than 'bragging rights' there are few real GHG emission reduction benefits to GPCs at present, the green power is already being generated, supplied into the grid, and paid for. This could

change if the GPCs were used to finance new renewable energy projects.

In the race to combat climate change we have a wonderful provincial resource in BC Hydro. Unfortunately BC Hydro no longer undertakes new power-generation projects but contracts them out to Independent Power Producers. This practice eliminates our ability to develop new publicly-owned renewable energy supplies and raises concerns about the types of projects being approved, and the prices paid.

BC Hydro needs to hear from the people of BC on what we expect from our power provider in the twenty-first century; it certainly has the resources to be a world leader in new carbon-free renewable energy production. ☞

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