Let?s change time-of-use power prices and put smart meters to work

By Gord Miller

Environmental Commissioner of Ontario

In my energy conservation report released recently, I recommended that Ontario should increase the difference between on-peak and off-peak electricity prices. This suggestion has drawn a lot of heat, but not much light. Let me repeat my message so there is no confusion.

Price signals encourage people to make decisions about when they use power. Right now, the off-peak or lowest price for electricity is 7.7 cents/kWh. It is available evenings and overnight for 12 hours a day. During weekends, this is the price all day. For 108 hours or two-thirds of the week, we pay the off-peak price. In my mind, the lower this price is compared to the on-peak price of 14 cents, the more incentive you have to use electricity during the low-priced hours.

Regrettably, in the last few years, the gap between on-peak and off-peak prices has got narrower and narrower so that we now pay an on-peak price that is less than double the off-peak rate. I called for this gap or the difference to be widened to perhaps five to one. I didn't say prices should rise. Increasing the price difference means increasing on-peak prices while also decreasing off-peak prices. As one goes up, the other must go down and the gap widens.

The hourly cost of using a kilowatt-hour of electricity can be seen in Ontario's electricity market price, which is often less than three cents during the night, but can rise to 30 cents or more when our use peaks during the day. At these cheap nightly market prices, why are we paying almost eight cents per kilowatt-hour? I suggest a paired response, reducing the off-peak 7.7 cent price and increasing the price paid at peak times.

A larger gap between on-peak and off-peak need not increase the average person's electricity bill. If a household uses the same amount of power ? at the same times of the day ? its bill stays the same. If this household adapts and finds a way to use less during on-peak times, its electricity bill goes down. There is a role for special conservation programs to assist customers who have higher than average peak electricity use and limited opportunity to shift like those in rural areas in older homes that heat with electricity. That's the immediate impact. What is always forgotten is the second part of the story. As customers respond to price signals and shift some of their electricity use away from peak hours, Ontario's long-term peak demand will drop. This drop would mean the need for expensive peak power generating stations and related transmission infrastructure declines as well ? yet another cost related benefit. Let's put those smart meters to work with effective time-of-use prices.