

WHAT IS A SMART METER?

A smart meter is a huge advance over Ontario's current, conventional meters. Why? Because a smart meter can record when, as well as how much, electricity has been used, and report that information to your utility automatically.

WHAT'S THE ADVANTAGE?

Smart meters make time-of-use (TOU) rates possible. These are rates that vary over the day, and by season, better matching the way prices rise and fall in the electricity market. Under TOU, rates are higher during peak hours when demand is high and lower during the off-peak when demand drops. As Conservation Halton has shown, responding to these price signals can help manage costs, plus help the environment and reduce the stress on our electricity system.

WHEN WILL SMART METERS AND TIME-OF-USE RATES BE IN PLACE?

This new technology is being phased in across the province now. By 2010, every home and small business in the province will have a smart meter. Your Local Distribution Company can tell you when implementation is scheduled in your neighbourhood.

HOW CAN I HELP...STARTING NOW?

Lots of simple and common-sense actions can make a real difference – both now and when TOU rates take effect. Actions like:

1. Shifting the most energy-intensive activities to off-peak periods – like laundry, for example – to after 10 pm during the week and anytime on weekends.
2. Aiming to reduce electricity use across all periods of the day.
3. Opting for energy-efficient products, wherever you can.
4. Taking advantage of the conservation promotions offered by your utility and the Ontario Power Authority.

Smart Meters:

A smart way to think about electricity

It is a few days before Christmas and Ontario's electricity system is straining to meet the added demand caused by the cold weather and holiday lighting. By nightfall, our needs are increasing as families turn on lights, appliances and prepare hot meals. Ontario's electricity generators are operating at capacity, so, additional power is being purchased from Quebec, Manitoba and Michigan. And, because supplies are tight, prices begin to rise alarmingly. This scenario is one that occurs periodically throughout the year.

When it does, in steps Conservation Halton, the local environmental agency, to help alleviate the situation. During periods of high electricity prices, system reliability concerns—and on those days when our air quality is compromised, in part, by the need to turn to less environmentally-friendly electricity generation—the staff at every one of Conservation Halton's 59 facilities springs into action.

It all begins with a notification received at the Administration Centre in Burlington. This notice is relayed to the "Energy Marshall" responsible for each of Conservation Halton's buildings. Voluntary energy use reductions are then undertaken—including turning down the heat a few degrees, as well as turning off unneeded lights and equipment.

Bob Harris, executive director at the Glen Eden Ski and Snowboard Centre, owned and operated by Conservation Halton, knows his snow making equipment is a significant factor in this effort. The huge electric motors it uses to vaporize water and make snow crystals are so large that when they are in operation, they are the tenth largest consumer of electricity in Milton.

Staff at Glen Eden are on call night and day to ensure those snow making systems are operated optimally. The installation of a "smart" electrical meter at this facility has been a welcome addition to the arsenal of energy management strategies.

Smart meters are an advanced technology that can record when electricity is used—and that allows different electricity prices to apply during different hours of the day. Under time-

of-use rates, the price is highest during periods of high demand and, naturally, it is low when use is at a minimum.

Bob says, "Now our operators know exactly when they can make snow most cost effectively and do so, weather permitting. This one strategy alone has the potential of reducing snow making costs by up to \$75,000 per year".

"During the summer we take a similar action by reducing air conditioning," says Brian Coombs, Conservation Halton's Maintenance Co-ordinator. "And because air quality issues are most likely to arise during the warmer weather, we re-

duce the use of gasoline and diesel motors as well. If we can delay grass cutting for a day or so to help the environment, we will. Overall we are able to reduce our consumption by 10 to 30% as a result of our co-ordinated efforts."

Kevin Keith, the Director of Conservation Land Services, says, "Conservation Halton is pleased to have partnered with the four electricity distributors who, together, have provided us with the smart metering tools and strategies that allow us to be part of a conservation effort." After all, conservation is who we are!"

