

Milton Hydro's Energy Drill Program™

A No-Cost Demand Response Pilot

Milton Hydro's Energy Drill Program™ is an innovative energy conservation program modeled on the concept of a fire drill. The energy drill is employed to respond to high electricity prices and critical supply constraints. The idea behind the program initially sprang out of the 2003 Blackout.

Piloted in 2005, the Energy Drill Program was introduced by Milton Hydro in the Milton Leisure Centre, Robert Baldwin Public School, and the Milton Library, among others.

The program provides a rapid way of reducing electricity use during short-term supply constraints. It provides a way of reducing Ontario's vulnerability to high prices, reduces pollution on smog days, and involves the community by encouraging them to accept responsibility and to take action.

"When demand response is able to change the behaviour of consumers, it can be a very powerful thing," says Don Thorne, President and CEO of Milton Hydro. "The Energy Drill Program is a tool that helps uncover and deliver behaviour based on no cost demand response and conservation capacity."

When electricity prices exceed a threshold level, typically 0.12 \$/kWh, Milton Hydro notifies program participants so that they can initiate their Energy Drill Action Plans, which include turning off non-essential equipment and deferring work that uses sources of electricity where possible. Other triggers can include reliability or environmental concerns. Drills last one to two hours, after which deferred work can be completed and non-essential uses of electricity can be brought back to service. Where demand response is required over multiple hours, participants' available short-term responses can be co-ordinated to produce maximum benefit.

When Robert Baldwin Public School is in a Drill, or a Drill is expected, there is an announcement over the PA. The school knows at least three hours in advance when a Drill will occur. The following day, a report is available from Milton Hydro showing how much electricity use at the school changed before and after the Drill.

jurisdiction. The Halton District School Board is anticipated to pilot the program in three additional schools, in parallel with the Toronto initiative and coordinate efforts between the Boards. Most importantly, the Drill Program is garnering increased attention from other regions as well, including Durham.



Grade 5 Energy Drill 'Marshalls' and their teachers are flanked by Ontario's Chief Energy Conservation Officer, Peter Love and Milton Hydro's Chair, Sharon Barkley. The students were awarded the Conservation Bureau's Certificates of Recognition for the exceptional efforts they have undertaken to conserve electricity (Photo courtesy of Milton Hydro).

Ontario's Chief Conservation Officer in his 2005 Annual Report lauded the Milton Hydro pilot program, and both the school and Milton Hydro received Certificates of Recognition from the Ontario Power Authority (OPA).

The popularity of the program is growing. The Toronto District School Board (TDSB) has applied for funding through the OPA's Conservation Fund in order to expand the Energy Drill Schools Program in their

As the initiative is further expanded, there is great potential for other School Boards in the province to take up the program. It is also hoped that the success of the Drill program pilot will make it possible to roll the program out to municipal buildings, and commercial and industrial facilities.