Retail Electricity Price Reform in Ontario

ONTARIO SOCIETY OF PROFESSIONAL ENGINEERS
BEHIND EVERY GREAT ENGINEER.

Issue: Ontario is wasting a significant amount of surplus emission-free electricity.

Opportunity: The Government of Ontario can implement electricity price reform that will allow consumers to use that surplus to reduce their annual energy bill and greenhouse gas (GHG) emissions without imposing additional costs on the electricity system.

Background

- In 2016 and 2017 enough emission-free electricity for 840,000 and 1.1 million households respectively was curtailed (wasted) in Ontario.
- This occurred because our low-emission electrical system produces a significant amount of surplus emission-free electricity, however, consumers are currently unable to purchase or use it to displace their fossil fuel use because of the high energy rate in our retail electricity price plans.
- Ontario's current retail electricity price plans charge too much for energy use and too little for fixed system costs.

Recommendations

1. **The Ministry of Energy, Northern Development and Mines should revise current legislation and regulations which prevent consumers from purchasing surplus emission-free electricity (interruptible electricity) at its wholesale market energy price.**

When surplus emission-free electricity is available, the preferred order of energy use should be:

a. Make surplus emission-free electricity available to all Ontario ratepayers for displacing fossil fuels, especially heating oil and propane used for thermal energy needs, and to industrial consumers to displace natural gas for the production of hydrogen gas.
b. Export the balance of the surplus electricity that cannot be used in Ontario.
c. Curtail any residual surplus amounts that cannot be used within Ontario or exported.

2. **The Ministry of Energy, Northern Development and Mines, in collaboration with the Ontario Energy Board and Local Distribution Companies (LDCs), should deploy voluntary smart price plans for various consumer groups. These plans should include the following features:**

a. Retail price components should align with the actual fixed and variable electricity system costs.
b. Retail prices should encourage peak power demand reduction via load shifting/levelling, conservation and energy efficiency.
c. Retail prices should encourage use of surplus emission-free electricity for fossil fuel displacement.
d. The design of these voluntary smart price plans should take into account the state of technological capability of the LDCs' metering and communication infrastructure.

Consumer Savings

- OSPE estimates that there will be sufficient surplus emission-free electricity in the long term to displace 36% of the fossil fuel use in 1.3 million homes.
- OSPE estimates that the annual total energy bill savings that a typical fuel oil residential consumer can expect using OSPE's proposed Energy Plus Peak Demand Smart Price Plan would be approximately $800/year with a carbon price of $50/tonne carbon dioxide and $720/year with no carbon price.

Contact the Ontario Society of Professional Engineers at advocacy@ospe.on.ca to learn more.