

# ONTRARIO FEDERATION of AGRICULTURE

## Suggestions Relating to the Provision of Smart Meters in Ontario

### A Responses to Smart Meters

The initiative to move towards smart meters is founded on a belief that if consumers are presented with a price, they will respond to it in a rational and predictable manner by consuming more or less according to their budget constraints. This is true, as far as it goes, but it is not a complete view of how people respond to prices. Some people can and will consume less if prices rise or in periods when prices are higher. This anticipated response is one of several kinds of rational responses. It is called price rational. Other people cannot consume less or will not consume less. Their behaviour may also be rational, and rational types of such behaviour include:

- 1 Carry on and consume as price does not make enough of a difference to those with large incomes. This might be called luxury consumption or comfort rational. These people will not be constrained by price, but will continue to waste power and drive up the cost of power for their neighbours contributing to poverty and unemployment. It is hoped that this group is relatively small and will have only a trivial impact.
- 2 Carry on consuming because they must consume as and when they do for cooking, refrigeration, heat, elevators, printing papers etc. This is technically constrained demand or low technical elasticity of demand. They will pay more and the increased cost will come from their savings or their consumption on other valued goods that their neighbours produced, or in companies, by reducing payrolls. Jobs and demand will fall. This group will include all people who cannot change when they do critical activities and is likely a large portion of small and medium scale power users.
- 3 Consume less in Ontario by moving business to a different jurisdiction. This is footloose consumption and is an extreme price rational response. These firms will leave Ontario and set up elsewhere, enriching that other place with jobs, taxes and incomes that used to be Ontario's and leaving the newly jobless behind. This sector will include energy intensive manufacturing such as plating, electro-adhesion, electro-reduction, some laundries, and businesses that can keep a sales office in Ontario and move production out of province. Ontario will find out how large this sector is through painful experience. OFA is particularly concerned that energy intensive farming and food processing will have to relocate out of Ontario or suffer from competition from lower energy cost jurisdictions.

These other responses are recognized in economic literature. They harm Ontario and they are the probable general response for substantial groups. Sound practice would ensure that policies would only be selected if the harm from these other responses plus the costs of implementation would be less than the benefits expected from price rational responses. So far, there is nothing in the smart meter implementation plans to protect Ontario from such effects. OFA's comments on the smart meter plan are aimed at minimizing adverse responses and maximizing positive responses to help make new meters and rates work for, not against, Ontario.

## **B Making Smart Meters Less Harmful**

OFA believes smart meters can help with conservation and load shifting; but that there are negative impacts that should be anticipated and countered in advance. For many installations smart meters will cost more than they save. Intelligent implementation can greatly reduce such wasteful and counter productive use of smart meters.

### **B1 General Exemptions or Equivalentents**

Some classes of users or periods of use should be broadly exempt from smart metering.

- 1 All residential, farm and small business use on weekends and holidays should be at a base price. This is important as otherwise ordinary family holiday activities such as cooking a major meal could be jeopardized by fear of electricity price spikes. This can be achieved through the Smart Meter Regulated Rate Plan.
- 2 OFA believes several classes of customers should not have smart meters as there is no reasonable prospect that the cost of the meters could be covered in energy savings. These include:
  - 1 seasonal residences such as cottages
  - 2 seasonal connections such as pumps for livestock or irrigation
  - 3 connections where power use is under 12,000 kwh per year
- 3 Smart meters for rural areas will have the highest communication cost. Consistent with the intent of the Rural Rate Assistance Act, OFA suggests that RRA be increased to ensure no rural customer (not just those on RRA) suffers an increase in service charges of more than \$ 3.00 per month as a result of smart meter installation or operation. This would hold rural increases to the same level as that in urban areas.
- 4 Farms have a bias to off peak use. Nonetheless OFA believes smart meters should be voluntary on Ontario's farms.

OFA asks that the OEB recommend the above time, group exemptions and rate assistance to the government as part of the smart meter implementation program.

## **C Making Smart Meters More Effective**

OFA believes that for smart meters to work well in Ontario their installation must be accompanied by effective education and aggressive support for load shifting equipment including timers, programs to control air conditioning and hot water loads, shifting to oil and gas for heat, heat and pneumatic energy storage systems, increased water reservoir capacity to avoid day time pumping, and similar devices. Tax support and rebates for such equipment will help Ontario avoid an energy crunch.

Conservation and load shifting are keys to holding energy costs. Not enough load shifting and conservation will happen with smart meters alone. There also have to be enabling investments in conservation and load shifting equipment and controls. These are private costs that produce public and private benefits. The cost of electricity falls for both the consumer who spends on conservation and load shifting investments and for those who do make no effort whatever. It is fair that the public sector assist those who make the load saving and conservation investments from which all will benefit.

OFA asks that the OEB recommend that at the same time as smart meters are being installed, the government provide assistance to install equipment of the following kinds:

- Centralized control of hot water heaters
- Shifting hot water heaters from electricity to gas when practical
- Installing motion or heat detecting switches to turn on the "auto-on" features of TV's, stereos, and other similarly equipped appliances
- Installing timers and/or limited thermostats for air conditioning units
- Phasing out or taxing inefficient light bulbs/subsidize ultra efficient lighting
- Placing lighting for advertising on separate meters and in a separate rate class
- Installing motion detector switches on equipment such as escalators and conveyor belts
- Re-wire office buildings so night lighting loads are reduced
- Implementing a regulation that requires built in timers on power consumptive appliances and motion detector switches on appliances with 'auto-on' features.

## **D Summary**

Smart meters are going to be a multi-billion dollar cost in Ontario. Eventually they will produce benefits in terms of reduced power costs and reduced need for new generator investments. They will also induce costs including lost output and employment. The above suggestions can reduce the costs and accelerate the benefits. OFA asks that the OEB strongly recommend these suggestions to the government.