Smart Meter Technology for the 21st Century



Introduction

This presentation covers

- An overview of electronic metering
- Types of "Smart" metering
- Implications of Smart Metering
- Recommendations for Demand Side Management
- Intellimeter Canada's position on Smart Metering

The Electronic Meter



Advantages:

- Remote and automated meter reading improves customer service
- Efficient data management
- Credible utility bills
- Power outages can be monitored
- Electronic measurements are more robust

Electronic Metering Systems are Versatile

Multiple utilities and other data can be recorded and monitored with electronic metering systems.





Multi Tenant Residential Smart Metering

Intellimeter Canada Inc. smart meter systems are metering thousands of multitenant residential and commercial buildings across Canada every day.



Intellimeter Canada Installations.

- This meter centre is installed at the Lester B. Pearson Airport in Toronto.
- It is integrated with the Siemens electrical distribution equipment.



Intellimeter Canada Inc. 24 Smart Meter Enclosure



Smart Meters - An Overview

"Smart" meters record the consumption of electricity in real time.

They know:

- how much electricity was consumed
 - and
- when it was consumed.

Types of Smart Meters

There are two types of Smart Meters

- Time of Use (TOU) Meters
 and
- Interval Meters

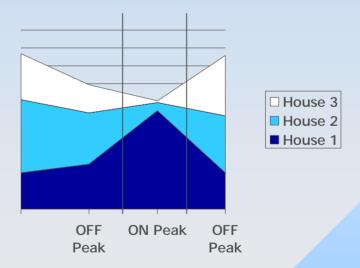
Time of Use Meters

Measure energy consumption in preset

time periods.

On Peak Period

Off Peak Period



Interval Meter

 Measures energy consumption in pre-set intervals (usually every 15 minutes).

These meters:

- Produce large volumes of data.
- Require a computer to produce reports and utility bills.

Reading Smart Meters

Time of Use meters

- Measure pre-defined blocks of time
- Have lower costs

Interval Meters

- Can measure many more blocks of time
- Are more expensive



Empowerment



- Smart meters allow electricity users to lower their electricity bills by shifting their usage to lower cost periods.
- Policy makers can implement Demand Side Management as a key part of their plan for addressing the nation's electricity needs.
- Power outage detection and restoration can be realized, making the meter a key component of a utility's ability to manage blackouts and stormrelated outages.

Intellimeter Canada Inc.

Canadian Technology from Intellimeter Canada Inc.

- Intellimeter Canada Inc. has been a pioneer in supplying digital meters for industrial, commercial, and residential consumers.
- Their proven results promise the successful marriage between high reliability and low cost electronics.
- Our smart meters are modular in nature. Additional functionality may be added to meet future customer demands as needed.

Recommendations for Demand Side Management

- Field trials should be conducted using basic smart meters.
 - Our smart meters are modular and can be customized.
 - Intellimeter is making cooperative efforts with Utility Providers to implement Smart Metering.
- Innovative financing
 - Introductory efforts will be required.

Summary

- Electronic meters offer many advanced features and versatility.
- The technology to address Demand Side Management is ready - Today.
- Intellimeter Canada Inc. is on the forefront of Smart Metering with state of the art equipment and support services.