

# GE Energy

## Smart Metering Presentation to the OEB

Jean-Pierre Leduc  
September 17 2004



# Strong Utility Supplier

## General Electric

112 Years tradition in electricity

2003 Revenues: 134.2 B\$, Earnings 15.6 B\$

Widely diversified: 11 industry sectors

## GE Energy

38,772 employees Worldwide

Over 150 manufacturing locations

Over 540 offices worldwide

## GE Canada

112 Year tradition in electricity

10,000 employee

## GE Meters

Canada

Mexico

Phillipines

USA

Several affiliates




# GE's Smart Metering Approach

## Our business is Metering

- Have been in meters since 1898
- Committed to metering
- Continuously investing in new products development & acquisition

## Our AMR strategy

- AMR technology neutral  greatest flexibility
- Partnering with best AMR & Systems vendors for complete solution
- Have integrated all significant AMR technologies  
(PLC, RF, TEL)
- Have worked with all major AMR vendors:  
DCSI, Hunt, ITRON, Motorola, Nertec, Silver Spring  
Network, Tantalus
- Looking to continue on and expand with same strategy

**GE's Smart metering experience is very diversified**

# GE Canada Large AMR/Smart Metering Projects

## Residential (1ph)

**Meter used: GE I70 Mechanical meter**

**Communication devices (AMR) supplied by 3rd party**

Location	Customer	Nbr of meters	Technology	Technology Supplier
Alberta	Atco	100,000	AMR : PLC	DCSI
Quebec	Hydro Québec	100,000	AMR: RF 450 MHz	AMRT (Schlumberger-Motorola)
Quebec	Hydro Québec	50,000	AMR :Telephone	Nertec
Ontario	Multiple	5,000	AMR :Telephone	Nertec
Canada	Multiple	15,000	AMR :RF 1 Way	ITRON (ERT 40 and ERT41)
Quebec	Hydro Québec	40,000	Energy management Multi Rate	GE and others (Rate activation) (Temperature based rate)
Pensylvani a	PPL	100,000	AMR: PLC	DCSI



# GE Canada Large AMR/Smart Metering Projects

## Commercial (1ph and 3ph)

**Meter used: GE KV Electronic Multifunction meter  
internal Telephone modem supplied by GE**

<b>Location</b>	<b>Customer</b>	<b>Nbr of meters</b>	<b>Technology</b>	<b>Technology Supplier</b>
<b>Quebec</b>	<b>Hydro Québec</b>	<b>18 000</b>	<b>Telephone 2 way Interval Data (Time base) Reactive measurement</b>	<b>GE</b>

# GE Smart Metering: Residential

Today		
	I70 Mechanical	I210 Electronic
PLC	2 Way	
RF	1 Way 2 Way	1 Way
Telephone	1 Way	

2005		
	I70 Mechanical	I210 Electronic
PLC	2 Way	2 Way
RF	1 Way 2 Way	1 Way 2 Way
Telephone	1 Way	1 Way

# GE Smart Metering: Commercial

Today		
	KV, KV2 Electronic	Kv2c KV2c+ Electronic
PLC	2 Way	2 Way
RF	Mobitex GSM 1Xrtt	1 Way GSM 1Xrtt
Telephone	1 Way 2 Way	1 Way 2 Way

2005		
	KV, KV2 Electronic	Kv2c KV2c+ Electronic
PLC	2 Way	2 Way
RF	Mobitex GSM 1Xrtt	Mobitex GSM 1Xrtt 2 Way 900mhz 1 Way 900mhz
Telephone	1 Way 2 Way	1 Way 2 Way

# GE Electronic 1ph Smart Meter for 2005: I210



Simple

Cost effective

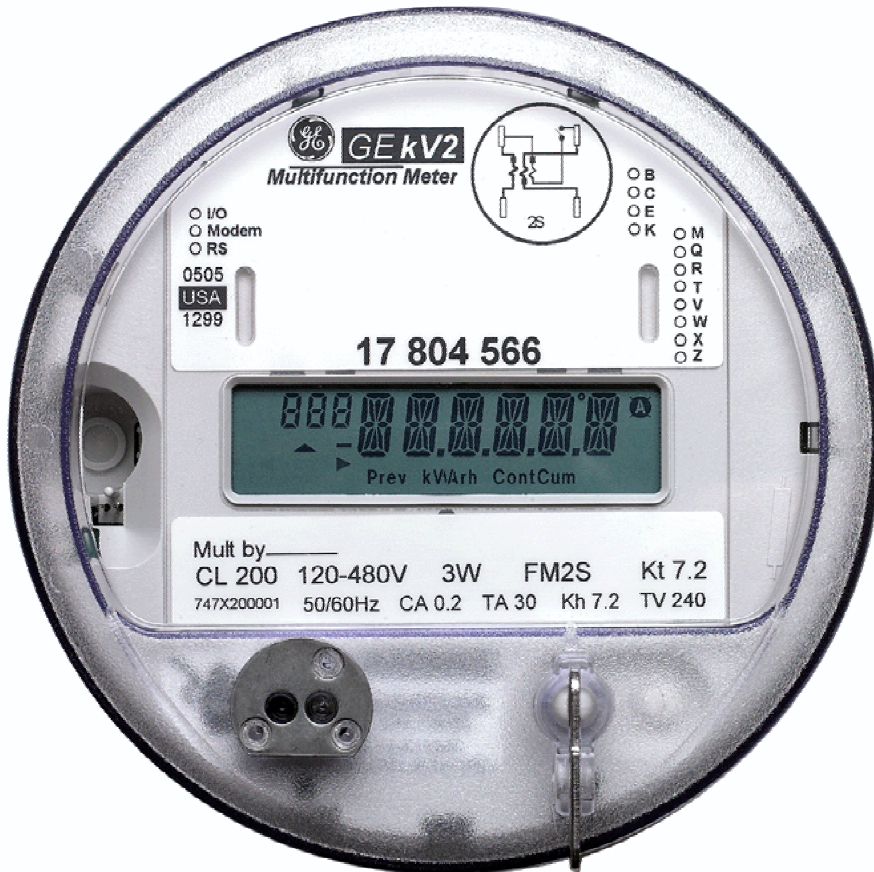
Measures Energy &  
Instantaneous power

Adaptable to any  
communication (AMR)

Available now



# GE Electronic 3ph Smart Meter for 2005: KV2c



Powerful

Scalable for any application

IMO main meter to Basic  
kwh meter

Reliable

Cost effective

Supported by various  
communication (AMR)

Available now

# GE Meter Solutions

**Long history in metering**

**Strong Utility Background**

**Committed to provide best meters**

**Partner with best AMR suppliers**

**Committed to Quality**

**Provide Flexibility and Value to its customer**