

# MDM/R Status Update and Plans

Smart Grid Forum August 19, 2008

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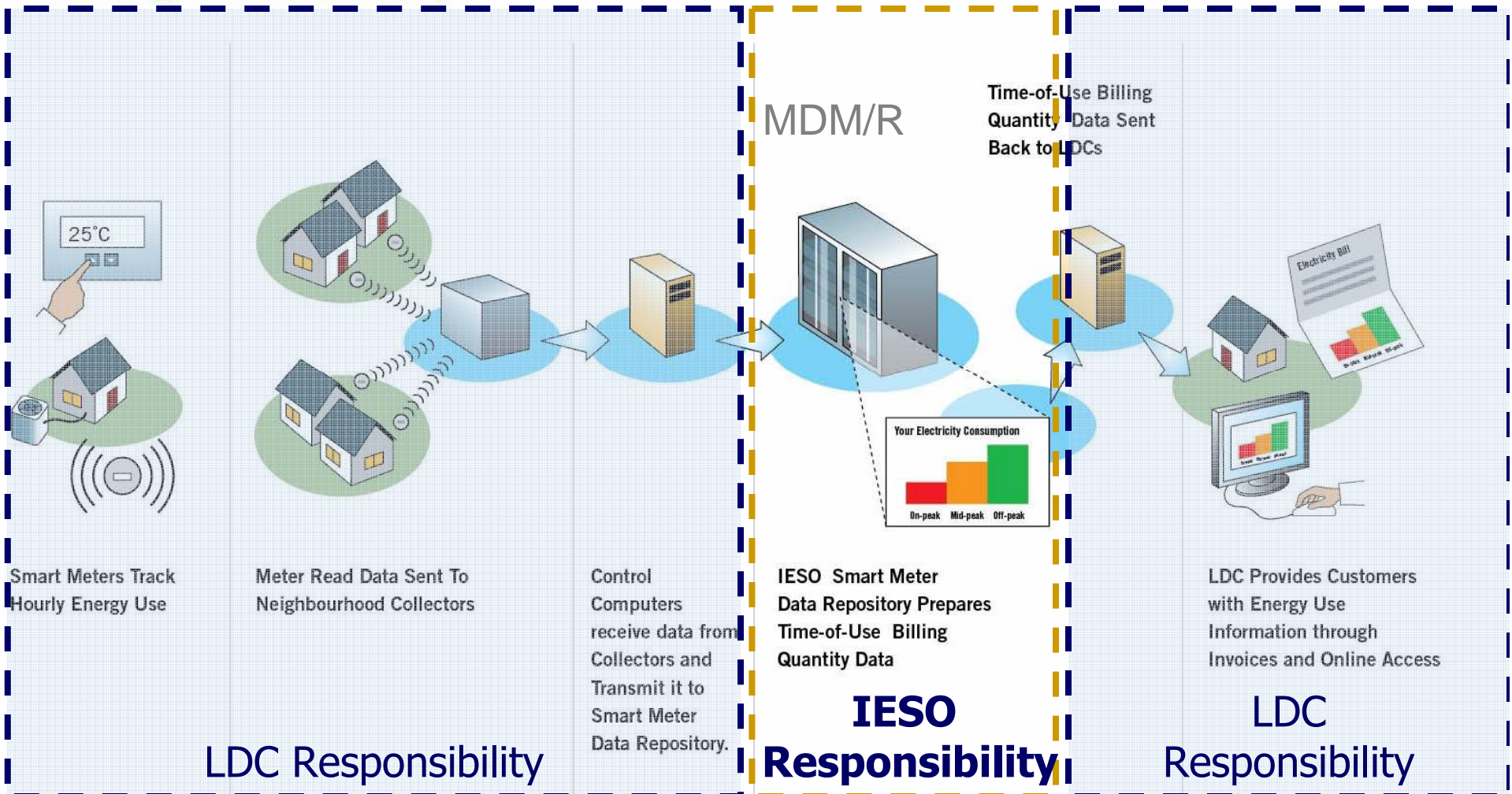


# Agenda

- MDM/R Scope
- Production Operation
- Delivery Project
- Going forward

# Components of the Smart Metering System

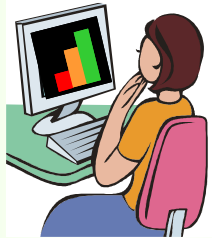
## The Energy Information Loop



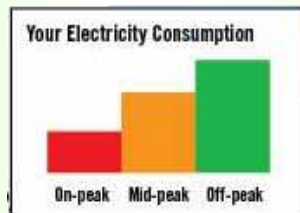
# Customer information and support

MDM/R - Currently in scope:

Web access:



Time-of-Use Bills (format TBD):



Interactive Voice Response (IVR):

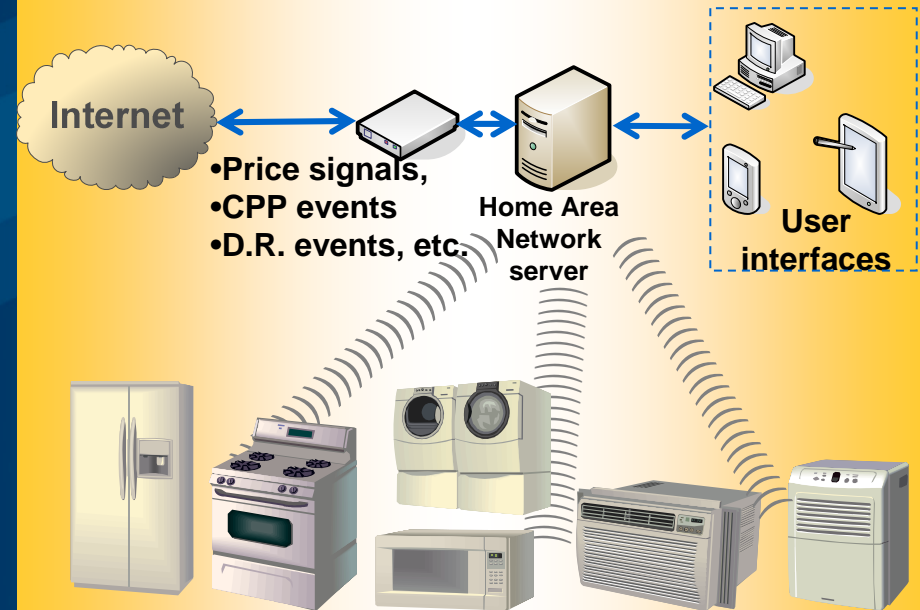


Complementary Technologies outside of the MDMR:

In-home Displays:



Home Area Networks:



# Converging Efforts...

- In its recent annual report, the OPA outlined plans for 26 CDM programs in in 2008.
- Over time, the Smart Metering System will continue to encompass a broader range of customers
- The Smart Metering System, its attendant support for Time-of-Use (TOU) rates, and numerous OPA programs will reach virtually every segment of the Ontario customer base...



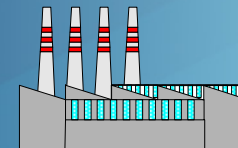
Residential



General Service  
Less than 50 kW



Large General Service  
(over 50 kW to 4,999 kW)



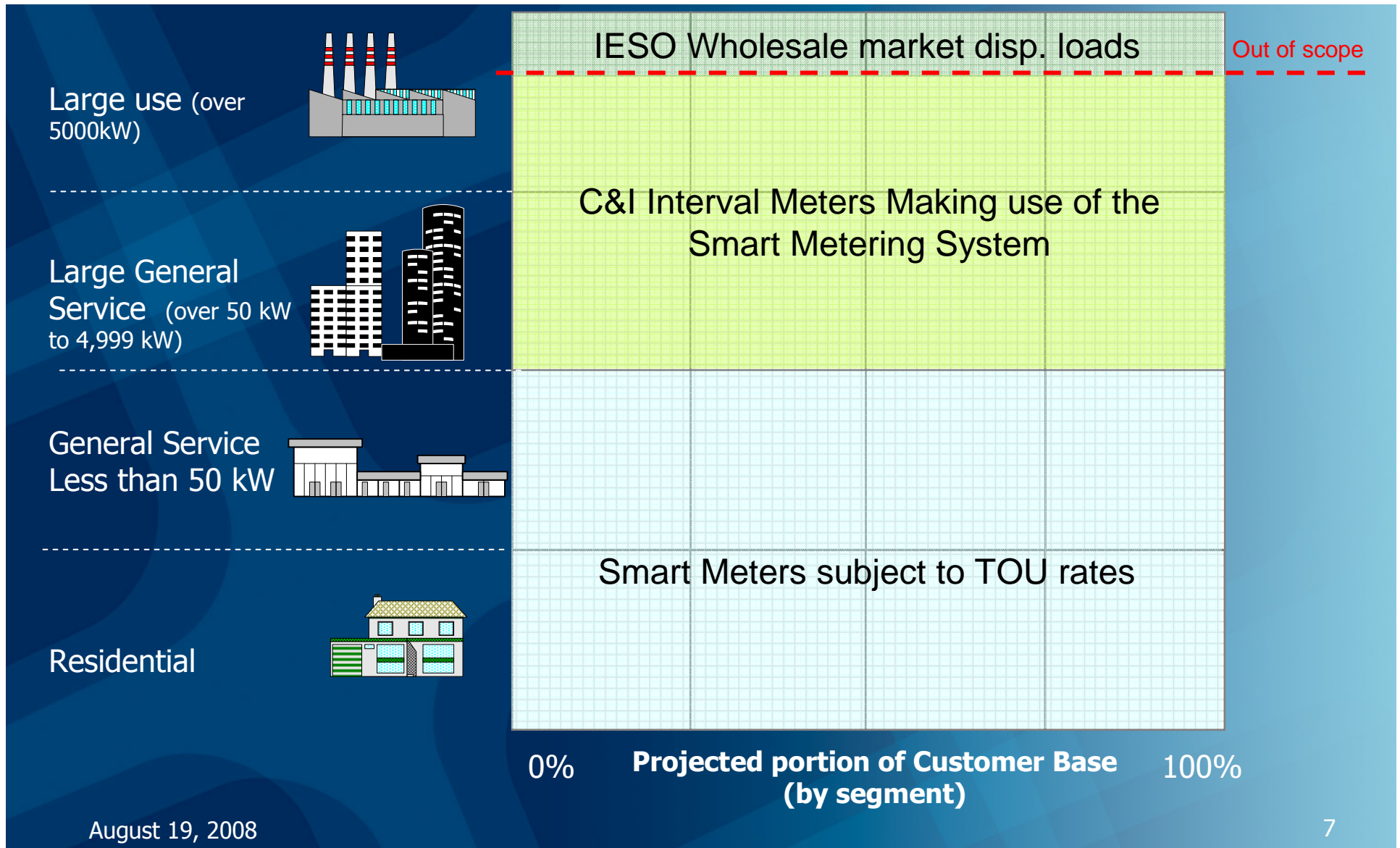
Large Use  
(over 5,000 kW)

# OPA - Current and Upcoming CDM Programs



Data Source: Ontario Power Authority: IPSP, DR Programs web page and various presentations.

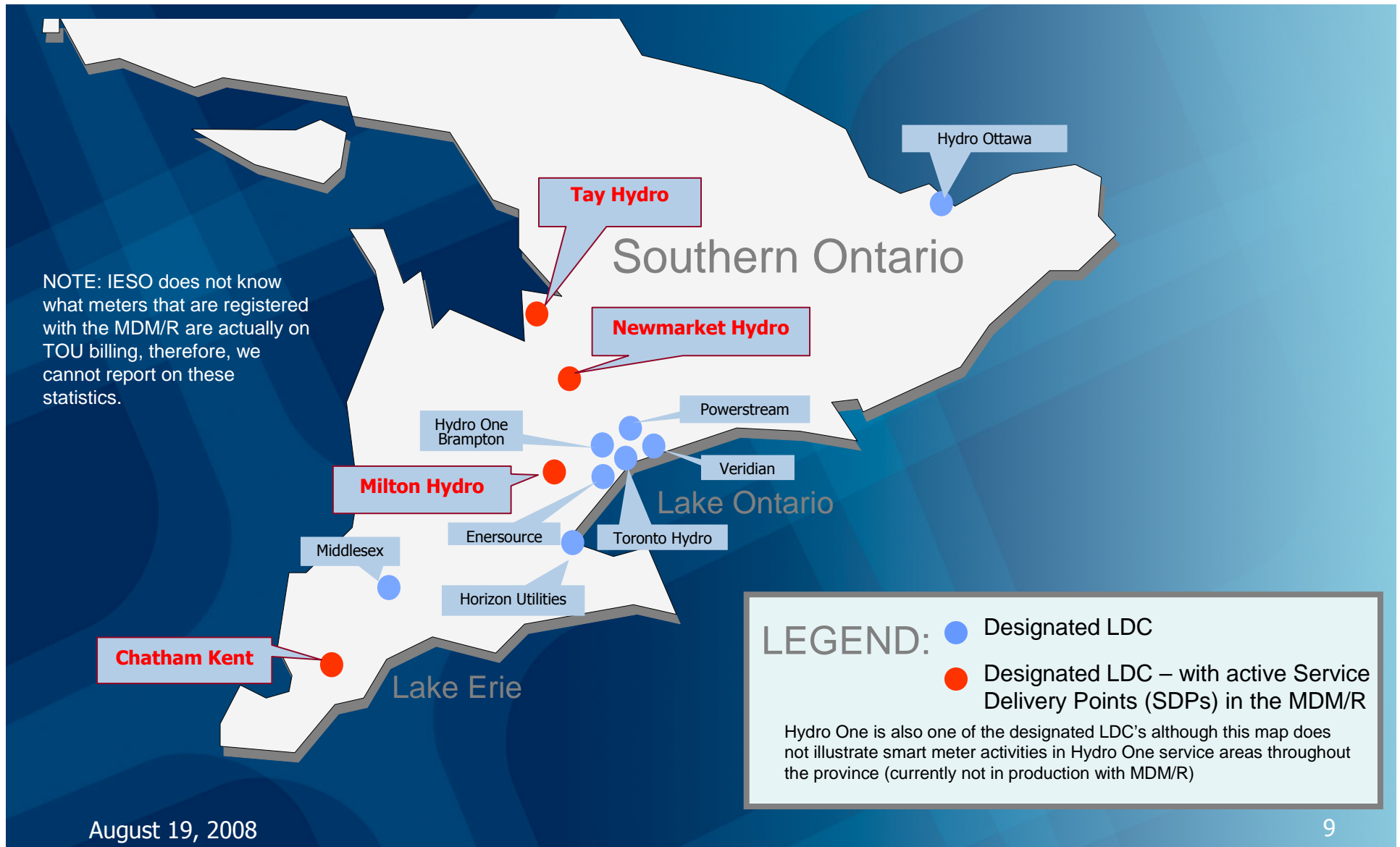
# Eventual Smart Metering System Reach



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# MDM/R Situational Overview – July 1 2008



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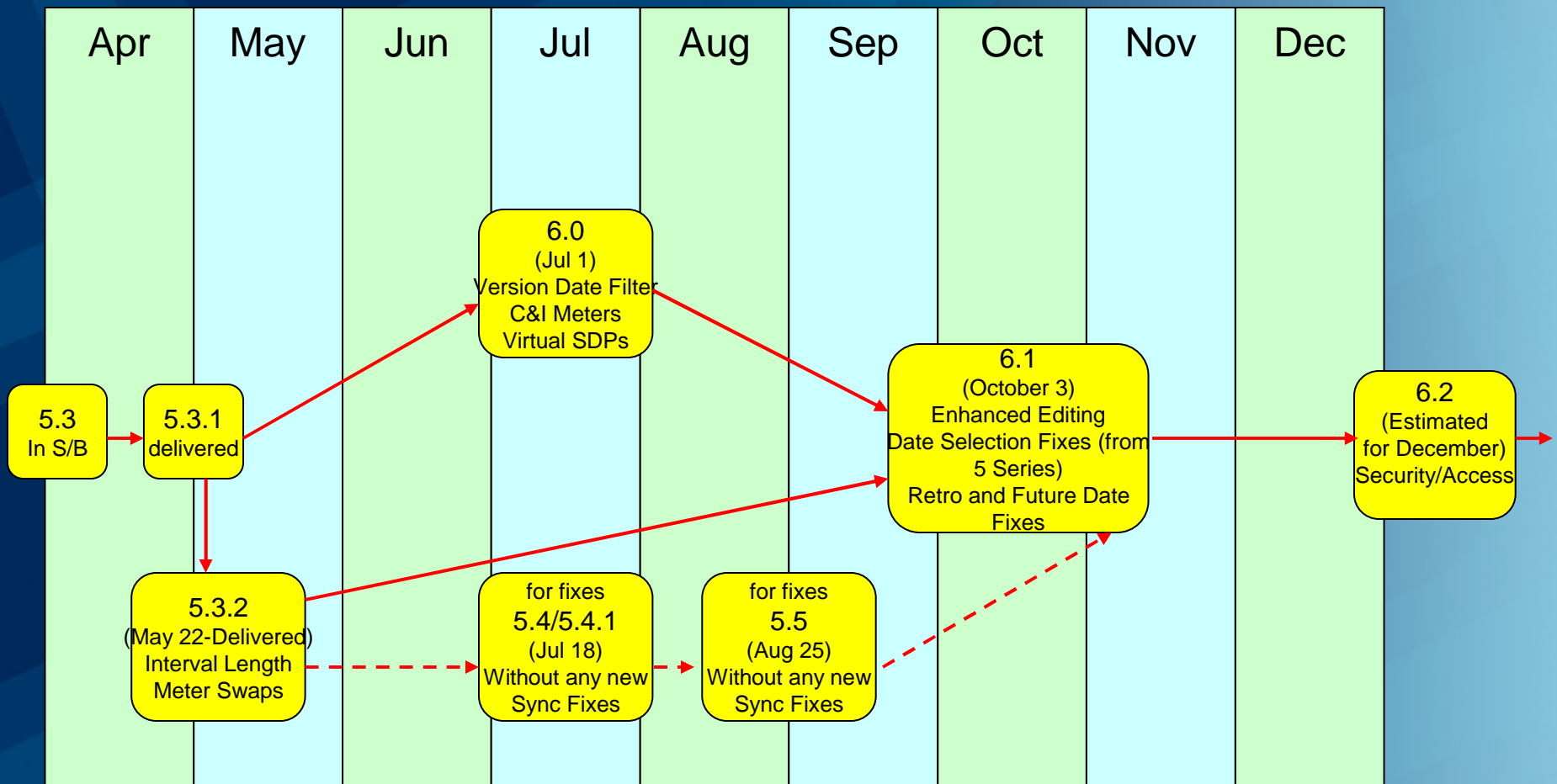
# Project workstreams

- Commissioning the MDM/R Releases
- Establishing SME Governance
- Establishing SME operating procedures
- Onboarding LDCs
- Supporting production operations
- Supporting communication initiatives
- Contract Management

# MDM/R Overview

- Late
- Under budget
- Good degree of fidelity to original requirements
- Attempting to accommodate additional LDC requests

# Planned eMeter Software Release Paths and Delivery Dates to IESO for Testing



- Software delivery
  - We are heavily dependent on V6.1 and V6.2 to deliver some master data synchronization fixes and the remaining contracted functionality
    - V6.1 will be delivered October 3, 2008
    - V6.2 will be delivered by year end 2008 or early January 2009
    - There is new functionality as well as fixes in these releases, thus quality of code is critical
    - Mitigation action:
      - eMeter is sharing their development plan weekly and including us in design reviews
      - IBM has placed one tester on the SCE team that will be testing V6.0 in areas of functionality relevant to IESO's needs.

# Lessons learned

- Maturity
- Ontario Culture
- Multiple Agendas/Roles

# SMI Communications – Pilot Update



- Summer Air Conditioning ad continuing to run in Newmarket and Milton
- Small Business content development underway:
- Internet Ad to be deployed in September to coincide with improvements to Newmarket Hydro site
- Interactive House in beta testing
- Continuing to participate in TOU Implementation Working Group and Communications Sub-committee; supporting Ministry efforts to develop umbrella campaign.
- Next steps:
  - Follow-up quantitative survey in Milton at completion of summer ad campaign.
  - Newmarket campaign to revert to dishwasher messages in September.
  - Follow-up quantitative survey in Newmarket toward the end of the year.

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# New Initiative: MDM/R Support of Commercial & Industrial (C & I) Meters



- Convened joint session of the AMI and CIS Working Groups to stakeholder the full set of C&I requirements as well as the VEE needs on July 22<sup>nd</sup>.
- Delivery of partial C & I functionality to be included with Release 6.0 to be available to IESO in July. Current plan calls for leveraging some testing of R6.0 new functionality at another eMeter client's facilities in California with remainder of testing to be conducted when R6.1 is delivered to IESO in early October.
- Subsequent functionality, if needed, to be delivered in concert with eMeter's product enhancements

# To watch for

- Net metering
- Sub metering
- TOU bill format to be finalized
- SMC Rate
- Additional regulation?
- Future EnergyIP functionality?
- Retailer activity in the SMI world

# Questions?

