

AEMC Public Forum:

Expanding Competition in Metering and Related Services

**Will the draft metering rule
deliver consumer benefits?**

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Consumers and smart meters

- What services will consumers expect today and in the future?
- What do smart meters mean to consumers today and in the future?
- What are key concerns and risks for consumers?
- How will smart meters be efficiently provided for consumers, and utilised?

What is a smart meter?

As smart meter is a

- **remotely read** (two way communication with energy business/es)
- **interval meter** (measures and records energy at the time it is used)
- **with a suite of enhanced functions** (intended to deliver benefits for consumers and energy businesses)

ISKRA

2008

09.1 004907

T1 T2 T3 T4 BR SE SO PEG DR0 FF



No. 3001102



dlms



C10 Manufacturing order
 C01 Line
 C02 Date
 T&D Positive active energy
 T1a Positive active energy
 T1b Positive active energy
 T2a Negative active energy
 T2b Negative active energy

DL200 DL201 Signal strength
 DL201 DL204 Date

AG - 1 Ph 2 Wire

Type: ME372-
D3A42-P1B11
-M2K080Z



230
10(100)
50 Hz

COM IS15674

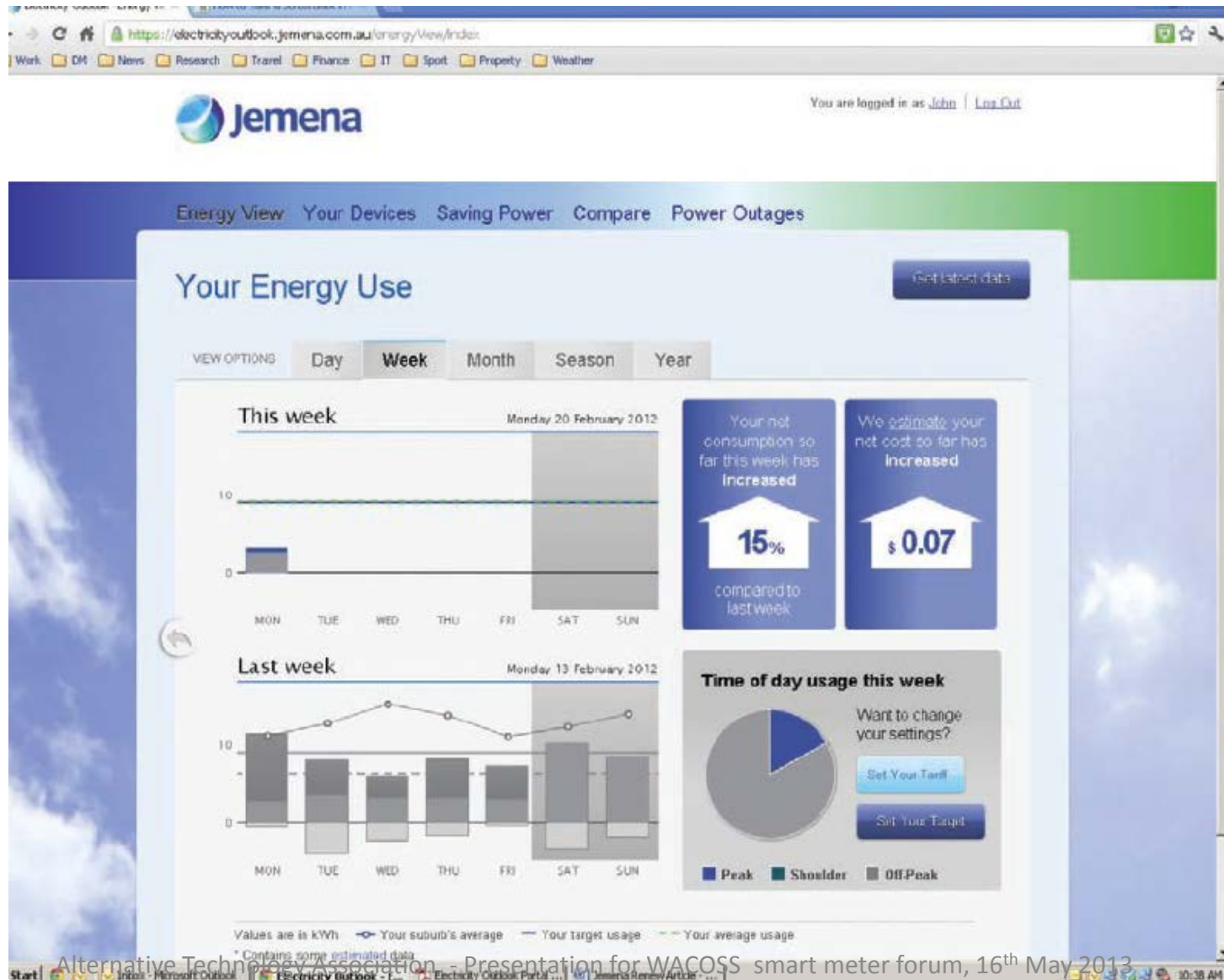


1000 Imp/kWh

In Home Displays



Online Energy Portals



Smart meter functions and services

Direct Load Control (DLC, aka load control) is the

- **Management** of certain consumer loads
- **by the utility, retailer or other third party**
- to **alter demand** on network or system
- in return for **financial incentive** for consumer.
- DLC can be direct switching of appliance, or
- telling appliance to manage its consumption

Future smart (meter?) services

Smart appliances and energy storage

- Tools for dealing with cost reflective pricing
- Appliances that **manage and store energy**
- Use less during peak times, shift to offpeak
- Balance on site generation and loads
- May receive signals for DLC
- AS4755 on the way, but not a lot available yet

Yeah that's all great but what do smart meters mean to consumers today*?

Portion of consumers	Meaning of smart meters
14%	A thing they had to buy to install a solar system
5%	Aware of smart meters, but no strong views and have more pressing things to think about right now
30%	SMART METERS?!? NOT IN MY FRONT YARD!!!
1%	Cool! Here is a tool with which I can sustainably manage my energy use and improve the electrical system, potentially saving us all money in the process. Where do I sign?
50%	Huh?

* Not real data.

Most consumers will acquire a smart meter for billing needs...

- To install solar PV
- Cost reflective pricing
 - Different prices for energy used at different times of day, week and possibly year
 - May include 'Peak Demand' or 'Critical Peak'
 - Might be 'two or three rate'
- New builds and some renovations

... oblivious to enhanced functions they
(and others) may need in the future

Today's consumers might not be thinking about

- Information and feedback for consumers
- More effective demand side participation (improved cost and sustainability)
- More efficient supply side expenditure
- More reliable supply, improved power quality
- Improved fault finding, faster restoration
- Improved safety

What if we don't achieve the objectives?

- Lack of access for some consumers to some services. This presents equity issues, confusion and risk for consumers
- Inefficiency (meter churn, asset stranding)
- Lack of innovation, with potential barriers to new entrants and services
- Lost opportunities to improve the performance and efficiency of energy networks (especially outside of Vic)

So how do we future proof smart meters for consumers?

- Consumers are interested in the services that meters enable, not meter functionality
- Consumers do not understand the implications of choices of metering and future communications capabilities
- Ensuring that consumers and networks aren't prevented from accessing enhanced services in the future is key to effective use of smart meters