



Level 2, 35 Spring St
Melbourne 3000, Australia
Telephone +61 3 9651 0222
 +61 1300 664 969
Facsimile +61 3 9651 3688

SMART METERS REGULATORY REVIEW – CAPACITY CONTROL AND VERIFYING BILLS

DRAFT DECISION

JUNE 2011

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1 | INTRODUCTION

In March 2010, the Essential Services Commission (the Commission) commenced a review of energy regulatory instruments, for which it has responsibility, to ensure that they would continue to promote the interests of customers and provide clear obligations for distributors and retailers when dealing with electricity customers with smart meters.

After extensive consultation, including holding a public forum, two workshops and receiving comments on an Issues Paper and a Draft Decision, the Commission made its final decision in September 2010¹. However, there were several matters that the Commission believed required further consultation. These matters are:

- the regulation of load control products
- the regulation of supply capacity control products for purposes other than credit management
- inclusion of the total accumulated consumption read corresponding to the start of the billing period on customers' bills for smart meters and
- whether the distributors should be required to leave customers the final accumulation meter read when they change over the basic meter to a smart meter.

The Commission released an Issues Paper in December 2010 to commence a review of the above specific matters and received 15 submissions, from:

- the Energy and Water Ombudsman Victoria (EWOV)
- consumer welfare and advocacy groups:
 - Brotherhood of St Laurence
 - Consumer Action Law Centre (CALC)
 - Consumer Utilities Advocacy Centre (CUAC)
 - Victorian Council of Social Service (VCOSS)
- retailers:
 - AGL Sales
 - Country Energy
 - Lumo Energy
 - Origin Energy
 - Simply Energy
 - TRUenergy

¹ Note that all citations in this document are shown as Endnotes – see page 15

- distributors:
 - CitiPower and Powercor
 - Jemena Electricity Networks
 - SP AusNet
 - United Energy Distribution

Based on stakeholder feedback on the matters raised in the Issues Paper, the Commission has made a draft decision, which is detailed in sections 2 and 3.

In summary, the Commission does not intend to make a decision on supply capacity control and load control products at this stage of the smart meter roll-out, because there are still too many uncertainties surrounding the full potential of smart meter technology and consumers' response to the technology. This, however, does not affect the Commission's final decision banning retailers from offering supply capacity products to customers for credit management purposes.

Regarding the process of exchanging basic meters for smart meters, the Commission does not consider it necessary to require distributors to send the customer a reminder notice or to leave a final reading card at the customer's premises. This is due to the existing requirements on distributors to take a meter reading prior to a meter exchange, as encapsulated in the *Metrology Procedure*. The Energy Retail Code then requires the retailer to include that in the customer's next bill.

However, the Commission has made a draft decision that retailers will be required to include a start reading on customers' bills. The Commission believes that consumers are likely to be confused and more likely to complain if they find that there is no longer a start index read on their bills when a smart meter replaces the basic meter.

1.1 Deadline for submissions

The Commission is seeking stakeholder submissions on its draft decision.

Submissions are preferred in electronic format and should be provided to the Commission by 8 July 2011:

By email to: khayen.prentice@esc.vic.gov.au

Or mailed to:

Khayen Prentice
Regulatory Review – Smart Meters
Essential Services Commission
Level 2, 35 Spring Street
MELBOURNE VIC 3000

Or sent by a facsimile to: 03 9651 3688

Submissions will be made available on the Commission's website in accordance with its website policy. Any material that is confidential should be clearly marked as such. Publication is subject to the privacy policy available on the website (www.esc.vic.gov.au).

There are two types of capacity control products:

- supply capacity control and
- load control.

Supply capacity control means that all power to the customer's premises is switched off when the customer's load reaches a certain limit. The power would resume after a set short period, but if the load exceeds the limit, power will again be disconnected.

Load control differs from supply capacity control in that load control does not result in the disconnection of all power to the customer's premises. Rather, load control products turn individual appliances on and off. This could be done by using the Home Area Network feature of the smart meter. An example of load control is to cycle an air conditioner on and off. Load control may also be used for swimming pool pumps, heaters, refrigerators, freezers and other appliances.

Supply capacity control and load control products (collectively, "capacity control products") could be used by both distributors and retailers. The potential uses of capacity control products by distributors include rationing power and avoiding power outages in emergencies. Retailers may offer capacity control products so customers can manage their electricity usage, and their bills, when the cost of electricity is very high. The customer would be offered a saving on their bill for accepting disruptions to their load.

In the final decision on the smart meters regulatory review, the Commission decided not to allow retailers to offer supply capacity products to any customers for credit management purposes until 31 December 2013, when the matter can be considered again.² The Commission determined that it was premature to make a decision on retailers offering supply capacity control for non-credit management purposes. This is addressed in the present review. In its September 2010 final decision, the Commission did not seek to limit the distributors' use of supply capacity control.

That decision also acknowledged the benefit of load control products, but noted the Commission's wish to address certain issues relating to safety, and processes and protocols, before allowing load control products to be offered.

Submissions

In submissions to the December 2010 Issues Paper, distributors and retailers considered it premature for the Commission to consult on the regulation of capacity control services at this time. For instance, Jemena argued that the wireless interface feature of smart meters has yet to be progressed as part of the rollout. Therefore, to consider regulating supply capacity and load control products now

would be premature and stifle innovation.³ Origin Energy⁴ and Simply Energy⁵ believed that it is too early to know the full capabilities of smart meter technology and whether there would be a market for such capacity control services.

AGL⁶ and Origin Energy⁷ submitted that the minimum service level specifications for smart meters issued by the Victorian Government do not provide any scope for retailers to offer capacity control services to customers.

Submissions from CitiPower and Powercor⁸, United Energy⁹, SP AusNet¹⁰ and Simply Energy¹¹ indicated that the National Smart Metering Program (NSMP), coordinated by the Ministerial Council on Energy, is currently consulting on capacity control services and other technical issues related to such services. These submissions suggest that it would be more efficient for the Commission to await the outcome of the broader NSMP consultation process rather than undertake a jurisdiction-specific consultation process now.

Consumer advocacy groups and EWOV suggest that it would not be in consumers' interest to allow retailers to offer capacity control services, particularly supply capacity control. CALC¹² and VCOSS¹³ are concerned that, if allowed to offer supply capacity control services, retailers would target customers who are likely to have difficulties paying their bills.

According to CALC¹⁴, CUAC¹⁵ and EWOV¹⁶, there is also a risk, given the complexity, and consumers' lack of understanding, of these services, consumers may inadvertently enter into a supply capacity control contract without understanding the wider implications of these contracts. CALC, CUAC and EWOV are concerned that this risk is magnified by the retailers' direct marketing activities.

The Brotherhood of St Laurence envisages that already vulnerable customers, who are rationing their power consumption to manage their finances, may be tempted to enter into supply capacity control contracts to further ration their energy usage. The Brotherhood of St Laurence is concerned about how these vulnerable customers, who have not been identified as being in financial hardship, will be protected.¹⁷

2.1 Draft decision

Based on issues raised in the submissions, stakeholders do not appear to support capacity control services, in terms of regulating these services or allowing retailers to offer such services.

The Commission is aware that distributors are still rolling out smart meters. The Commission also notes that the NSMP is currently consulting on the technical detail of smart meters. These factors mean that at this time, the full capabilities of smart meters are unknown. Further, it is unclear whether consumers would embrace all the features and tariffs of smart meter technology. If there is no demand for such services in the energy market, it is unlikely that retailers would offer these services to consumers.

The ban on retailers' use of supply capacity control for credit management purposes, which was put in place by the Commission's final decision in September 2010, will remain until 31 December 2013 unless earlier revoked. The Commission's view is that it is too early at this stage of the smart meter roll-out to

make a decision on allowing or regulating retailers offering supply capacity control for non-credit management purposes. It is also too early to make a decision about allowing or regulating retailers' use of load control. Distributors' use of supply capacity control or load control in emergencies is acknowledged by the Commission as a valid means of rationing power and avoiding outages. Their use by distributors outside of emergencies is not sanctioned without further consideration.

The Commission acknowledges the value of innovation in the marketplace and does not wish to inhibit it. Equally, there is a need to understand and mitigate any risks these developments may present to consumers. The Commission is conscious that industry is yet to determine what products may be offered through smart meters and that national consultation processes are continuing.

Draft Decision

The ban on retailers offering supply capacity control for credit management purposes stands until 31 December 2013 unless earlier revoked. It is too early at this stage of the smart meter roll-out for the Commission to make a decision on allowing or regulating retailers offering supply capacity control for non-credit management purposes. It is also too early to make a decision about allowing or regulating retailers' use of load control.

The Commission acknowledges supply capacity control and load control may be used by distributors in emergencies to ration power and avoid outages. Their use by distributors outside of emergencies is not sanctioned without further consideration.

3.1 Readings at meter changeover

In the *Regulatory Review – Smart Meters Final Decision*, the Commission noted a suggestion from the Department of Primary Industries relating to the process for distribution businesses changing over a basic accumulation meter to a smart meter.

The Department suggested that distributors be required to provide the customer with a copy of the final reading of the basic meter at the time of changeover. This would allow customers to verify their final bill based on the accumulation meter and provide a starting point for verifying future bills from the smart meter. Options to achieve this outcome include requiring distributors to:

- leave a final reading at the premises at the time of changeover; or
- remind customers in the distributor’s letter that installation is imminent and that the customer should take the opportunity to note the current reading on the basic meter.

The Commission sought stakeholder submissions on whether distributors should be required to provide customers with a final read from the accumulation meter at the time of the meter exchange.

Submissions

Stakeholders had mixed views on this matter. The consumer advocacy groups, CALC and VCOSS, believed that, prior to the meter exchange, distributors should remind customers to take a final read from the accumulation meter.¹⁸ Then, after installation of the smart meter, distributors should leave a note with the final read at the customer’s premises. VCOSS explains that some customers may lack the understanding to take their own meter reading and it may not be accurate.¹⁹ CUAC also believed that vulnerable customers may not have sufficient knowledge to note the read from their own meter and, therefore, supported the option of distributors leaving a final reading at the customer’s premises when the meter is exchanged.²⁰

Origin Energy²¹ also believed that distributors should provide customers with a final meter read from the accumulation meter, but this view was not shared by other retailers and distributors. AGL²², CitiPower and Powercor²³, Lumo²⁴ and SP AusNet²⁵ advised that distributors are already required to take a final reading from the old meter prior to any meter exchange, which is then shown on the customer’s bill for that period.

Both Jemena and United Energy preferred sending a reminder notice for customers to take their own reading before the accumulation meter is replaced with

a smart meter. Jemena is concerned about the additional cost imposed on the smart meter roll-out if distributors have to provide customers with the final reading.²⁶ According to United Energy, if required to leave a final reading at the customer's premises, cards would need to be developed, their meter reader would need additional time to fill out the card, there is no guarantee that the customer would receive the card and there may be increased call volume to distributors.²⁷

3.1.1 Draft decision

The Commission notes the advantages and disadvantages raised by stakeholders for each option. Requiring distributors to only send a notice reminding customers to take their own reading from the basic meter prior to its replacement is advantageous in that it imposes less cost on distributors. However, this assumes that all consumers have sufficient knowledge, and are physically able, to take a reading from the meter, which cannot be assumed to be the case. Further, the reading noted by a consumer in the days leading up to a meter replacement will not exactly match the final meter reading taken by the distributor's meter reader.

The alternative option of requiring distributors to leave a card with the final reading from the accumulation meter may overcome the above problem, but there is a possibility that consumers may perceive the card as another "junk mail" item and throw it out.

Further, distributors are required to take a final reading before replacing a meter. Clause 2.8 of the *Metrology Procedure: Part A* specifies that, at the time an existing meter is de-commissioned, a final reading must be taken. Retailers are then obliged, under clause 4.2(g) of the Energy Retail Code, to pass this information on to customers (through the bill). This clause requires retailers to show on the customer's bill the total amount of electricity consumed, and for an accumulation meter, the end readings for the previous period and the current period. An extract from a retailer's bill for a customer, whose basic meter has been replaced by a smart meter, is shown in Box 3.1.

Box 3.1 Extract from a retailer's bill

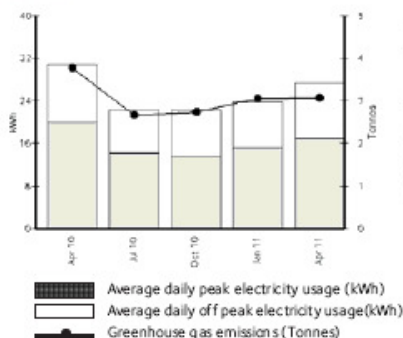
Your overall picture.

Usage

Average usage per day
27.32kWh

Same time last year
34.10kWh

Average cost per day
\$5.64



Greenhouse gas emissions

Total for this bill:

3.07 tonnes
from 2267.705 kWh

For information on how to reduce your greenhouse gas emissions, visit www.climatechange.vic.gov.au

Your account in detail.

Supply address

7 Sample St DEER PARK VIC 3023

NMI

9999999999

Supply period

15 Jan 2011 to 7 Apr 2011

Plan

Freedom 5%

Reading type		Actual read on 22 Mar 2011		
Tariff description		Residential Home - C		
Meter no.	Days billed	Previous reading	Current reading	Usage kWh
7663791	67	15380	16588	1208
7663791	67	10670	11390	720

Reading type		Actual read	
Tariff description		Residential Weekend Saver - C	
Meter no.	Days billed	Usage kWh	
DZ111111	16	205.851	
DZ111111	16	133.904	

Usage	Charge
Old Rate Prorate 15 Jan 2011 to 20 Jan 2011 6 days	
Peak 66 kWh @ \$0.1868	\$12.33
Next 42 kWh @ \$0.1983	\$8.33
Off Peak 64 kWh @ \$0.0848	\$5.43
Supply Charge	\$3.78
Off Peak Service Charge	\$0.94
New Rate Prorate 21 Jan 2011 to 22 Mar 2011 61 days	

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Given the existing requirements, the Commission does not consider it necessary to require distributors to leave a reminder notice or a card with the final reading from a basic meter when it is replaced with a smart meter.

Draft decision

Given existing disclosure requirements, the Commission does not consider it necessary to require distributors to leave a reminder notice or a card with the final reading from a basic meter when it is replaced with a smart meter.

3.2 “Start” readings on smart meter bills

The *Regulatory Review – Smart Meters Final Decision* included a requirement that retailers show on customers’ bills the total accumulated consumption read from smart meters, corresponding to the end of the billing period, referred to as an “end index read” by industry participants.

The Commission believes this is an important method for customers to continue to be able to verify their bill and will overall be beneficial for customers. It continues the current arrangements for customers whose bills are based on readings from basic accumulation meters.

The Commission also supported in principle a request from the former Minister for Energy and Resources that retailers be required to also include in customers’ bills the consumption read corresponding to the start of the billing period, or the “start index read”.

The former Minister for Energy and Resources considered that including a start reading on smart meter bills would maintain existing information provision as enjoyed by customers with basic accumulation meters.

While the Commission agreed with the former Minister’s request in principle, it recognised that stakeholders have not been provided with sufficient opportunity to comment on this matter. Accordingly, consultation regarding the implementation of this proposal has been undertaken.

Submissions

Retailers are concerned there would be more customer confusion from including the start reading on smart meter bills. AGL²⁸, Lumo²⁹, Origin Energy and TRUenergy have submitted that customers are billed on the basis of both substituted and estimated reads, and customers are unlikely to be able to reconcile their bill with the start and end meter reads. TRUenergy explained that the sum of the half hourly readings from a smart meter, on which bills would be based, may not always match the difference between the start and end reads because the readings exclude estimates and substitutes.³⁰ Origin Energy believed consumers’ inability to reconcile the billed amount with the meter reads on their bills would result in increased complaints to EWOV as well as retailers’ call centre, and customers would remain dissatisfied as the billed amount cannot be altered.³¹

AGL, SP AusNet³² and United Energy³³ believed that the Commission and the Government should focus attention on educating customers about billing under a smart meter environment. There is also concern in the industry that maintaining existing billing practices with smart meters will result in the imposition of more costs on the industry, and ultimately end-users, through changes to their billing systems, increased training to call centre staff and having to deal with more customer complaints.³⁴

In contrast, EWOV submitted that customers' inability to verify their bills would result in increased dissatisfaction with retailers and complaints to EWOV³⁵. It is also CALC's view that retailers should not have much difficulty including the start and end reads on customers' bills as the meter is also regularly recording energy usage.³⁶ VCOSS pointed out that if customers are being encouraged to be more attentive about their energy consumption, then it would be appropriate that they be given this information to facilitate their understanding.³⁷

3.2.1 Draft decision

The Commission is not persuaded by the issues raised in industry submissions as currently customers' bills are not based entirely on the meter reads, but may be based on substitutes and estimates. As substitution and estimation are already occurring with basic meters, the Commission cannot see how requiring retailers to include a start read on the bills would increase confusion and complaints. Rather, the Commission agrees with EWOV that removing the start read from smart meter bills would more likely to raise confusion, dissatisfaction and complaints as customers have become accustomed to seeing a start read on their bills. This can be seen in the example bill in Box 3.1.

Industry submissions have also asserted that including a start read on bills would raise costs for industry. However, these submissions have not explained why costs would increase. Further, as customers' bills currently contain a start index read, the Commission would expect that retailers' current billing systems would have a field for the start read. Without further information, the Commission does not accept that there is a significant case against including a start read in a bill due to raised costs for retailers.

Therefore, the Commission's draft decision is to require retailers to include a start read on smart meter bills.

Draft decision

The Energy Retail Code will be amended to ensure retailers continue to provide a start index read on customers' bills.

CHAPTER 1 - INTRODUCTION

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¹ Essential Services Commission 2010, *Regulatory Review – Smart Meters Final Decision*, September

CHAPTER 2 - CAPACITY CONTROL PRODUCTS

Page 6:

² Ibid, pp. 13-15

³ Jemena Electricity Networks 2011, *Smart meters regulatory review – capacity control and verifying bills*, February, p. 2.

⁴ Origin Energy 2011, *Re: smart meters regulatory review – capacity control and verifying bills*, February, p. 2.

⁵ Simply Energy 2011, *Re: smart meters regulatory review – capacity control and verifying bills*, February, p. 1.

⁶ AGL Sales 2011, *Smart Meters Regulatory Review – Capacity Control and Verifying Bills*, February, p. 1.

⁷ Origin Energy 2011, op. cit., pp. 1-2.

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⁸ CitiPower and Powercor 2011, *Re: smart meters regulatory review – capacity control and verifying bills*, February, pp. 2-3.

⁹ United Energy 2011, *Smart Meters Regulatory Review – Capacity Control and Verifying Bills*, February, p.

¹⁰ SP AusNet 2011, *Smart Meters Regulatory Review – Capacity Control and Verifying Bills*, February, p. 3.

¹¹ Simply Energy 2011, op. cit., p. 1.

¹² Consumer Action Law Centre 2011, *Submission to Smart Meters Regulatory Review – Capacity Control and Verifying Bills Issues Paper*, February, p. 3.

¹³ Victorian Council of Social Service 2011, *Submission to Smart Meters Regulatory Review – Capacity Control and Verifying Bills*, February, p. 2.

¹⁴ Consumer Action Law Centre 2011, op. cit., p. 6.

¹⁵ Consumer Utilities Advocacy Centre 2011, *Smart Meters Regulatory Review – Capacity Control and Verifying Bills Issues Paper*, February, p. 3.

¹⁶ Energy and Water Ombudsman (Victoria) 2011, *Re: Essential Services Commission Smart Meter Regulatory Review – Capacity Control and Meter Reads*, February, p. 2.

¹⁷ Brotherhood of St Laurence 2011, *Smart Meters Regulatory Review – Capacity Control and Verifying Bills*, January, p. 2.

CHAPTER 3 - VERIFYING BILLS

Section 3.1 – Readings at Meter Changeover

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¹⁸ Consumer Action Law Centre 2011, op. cit., p. 5.

¹⁹ Victorian Council of Social Service 2011, *Submission to Smart Meters Regulatory Review – Capacity Control and Verifying Bills*, February, p.4.

²⁰ Consumer Utilities Advocacy Centre 2011, op. cit., pp. 10-11.

²¹ Origin Energy 2011, op. cit., p. 6.

²² AGL 2011, op. cit., p. 5.

²³ CitiPower and Powercor 2011, op. cit., p. 4.

²⁴ Lumo Energy 2011, *Submission*, February, p. 3.

²⁵ SP AusNet 2011, op. cit., p. 5.

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²⁶ Jemena 2011, op. cit., p. 6.

²⁷ United Energy 2011, op. cit., p. 13.

Section 3.2 – “Start” Readings on Smart Meter Bills

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²⁸ AGL 2011, op. cit., p. 5.

²⁹ Lumo 2011, op. cit., p. 3.

³⁰ TRUenergy 2011, op. cit., p. 2.

³¹ Origin Energy 2011, op. cit., p. 7.

³² SP AusNet 2011, op. cit., p. 6.

³³ United Energy 2011, op. cit., p. 14.

³⁴ See submissions from Lumo, SP AusNet and United Energy.

³⁵ Energy and Water Ombudsman (Victoria) 2011, op. cit., p. 3.

³⁶ Consumer Action Law Centre 2011, op. cit., p. 5.

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³⁷ Victorian Council of Social Service 2011, op. cit., p. 4.