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# SMART METERS REGULATORY REVIEW – CAPACITY CONTROL AND VERIFYING BILLS

ISSUES PAPER

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Essential Services Commission 2010, *Smart meters regulatory review – Capacity control and meter reads*, December

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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 2010.<sup>1</sup> However, there are several matters that the Commission believes require 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 releases this Issues Paper to commence a review of the above specific matters.

The purpose of the paper is to seek stakeholder feedback on the issues raised, which will assist the Commission in making a draft and a final decision.

Comments are invited on the questions raised in this paper and on any other aspect of the matters being reviewed.

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<sup>1</sup> Essential Services Commission 2010, *Regulatory Review – Smart Meters Final Decision*, September

There are two types of capacity control products:

- supply capacity control products and
- load control products.

This section discusses these capacity control products and raises issues on which stakeholder submissions are sought.

### **2.1 Supply capacity control**

Supply capacity control means that all power to the customer's premise is switched off when the customer's load reaches a certain limit. The power would resume after a set short period. The system will continue to assess the load and, if above the limit, the power will again be disconnected.

It is envisaged that a limit would be set by the distributor and/or retailer nominating a chosen amount of electricity and the customer agreeing, in return for some inducement such as a tariff reduction. The Commission cannot yet satisfy itself that consumers are sufficiently well informed about electricity supply and usage to negotiate these options effectively.

Distributors could use supply capacity control in emergencies to help ration power and avoid power outages. It could also be used by the retailers to offer capacity limited tariffs to ration power and possibly avoid disconnection.

In September 2010, the Commission decided<sup>2</sup> 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. The Commission believes the issues surrounding use of supply capacity control for credit management are not yet sufficiently considered. Some aspects will become better known during the rollout of smart meters in Victoria, which is to be completed by the end of 2013.

However, the Commission is now reviewing the potential use of supply capacity control products by energy businesses for purposes other than credit management. The Department of Primary Industries (DPI) also sees benefit in further consideration of supply capacity control products prior to enabling retailers to offer these products to customers.

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<sup>2</sup> Ibid, pp. 13-15

In principle, the DPI supported prohibiting the use of supply capacity control products and tariffs as a credit management tool. The department was concerned not to restrict the positive benefits of such products, however, and proposed:

*“ a transitional prohibition, during which time the potential structure and operation of such products is closely examined and the adequacy of responding consumer protections tested, ”<sup>3</sup>*

### **Issues for comment**

The Commission seeks stakeholder comments on:

- how will cutoff limits be set and agreed?
- for how long should supply be cut off before restoring?
- Once restored, should the power remain on for a guaranteed period before being subject to cutting off again?
- Should there be limits for cutoffs in terms of how frequently and how many times in total?
- possible health and safety risks to consumers
- safeguards for customers on life support
- any potential for customers to manually override an automatic cutoff under supply capacity control
- how to ensure that supply capacity control is used only for purposes other than credit management
- ensuring that offers of supply capacity control include making customers adequately aware of the disadvantage they will experience by using this product
- what should be done if a customer agrees to have supply capacity control and subsequently suffers financial difficulty?
- for how long should arrangements about supply capacity control run? (e.g. for one year? For the life of the contract?)
- the customer’s ability to cancel a supply capacity control arrangement
- could supply capacity control arrangements be part of a standing offer?
- privacy considerations.

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<sup>3</sup> See DPI submission at [http://www.esc.vic.gov.au/public/Energy/Consultations/Smart%20meters%20regulatory%20review/Submissions.htm?docName=Draft Decision - Background Paper 1](http://www.esc.vic.gov.au/public/Energy/Consultations/Smart%20meters%20regulatory%20review/Submissions.htm?docName=Draft%20Decision%20-%20Background%20Paper%201)

## 2.2 Load control

Load control differs from supply capacity control in that load control does not result in the disconnection of all power to the customer's premise. 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.

Retailers may offer load control products so customers can manage their electricity usage, and their bills, when the cost of electricity is very high. Load control products may also be offered by distributors so that they can better manage that segment of the network, which is near capacity.

An example of load control is to cycle an air conditioner on and off. Doing this at one house would make little difference, but doing it across thousands of homes would reduce the loading on a network on a very hot summer's day. The customer would be offered a saving on their bill for accepting such a load control and the cycling of the air conditioner would be designed so that the customer's comfort was not materially affected. Load control may also be used for swimming pool pumps, heaters, refrigerators, freezers and other appliances.

In the final decision on the smart meters regulatory review, the Commission acknowledged the benefit of load control products. While the Commission did not wish to hinder the development of such innovation in the market place, it also considered that load control products may represent a risk to customers that needs to be resolved. The Commission's concerns include addressing safety issues, processes and protocols, before allowing load control products to be offered.

The DPI was concerned not to restrict the positive benefits of such products, however, and proposed:

*"...a transitional prohibition on the access by third parties to the direct load control functionalities enabled by smart meters"<sup>4</sup>*

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<sup>4</sup> See DPI submission at [http://www.esc.vic.gov.au/public/Energy/Consultations/Smart%20meters%20regulatory%20review/Submissions.htm?docName=Draft Decision - Background Paper 1](http://www.esc.vic.gov.au/public/Energy/Consultations/Smart%20meters%20regulatory%20review/Submissions.htm?docName=Draft%20Decision%20-%20Background%20Paper%201)

## **Issues for comment**

The Commission seeks stakeholder comments on:

- how will load control limits be set and agreed?
- for how long should an appliance be automatically turned off before restoring?
- Once restored, should the appliance remain on for a guaranteed period before being subject to turning off again?
- Should there be limits for appliance turnoffs in terms of how frequently, how many times in total, or the number of appliances involved?
- health and safety risks to customers from load control products
- third party roles in the provision of load control products
- ensuring that offers of load control include making customers adequately aware of the disadvantage they will experience by using this product
- the customer's ability to manually override on occasion when an appliance is automatically turned off
- the customer's ability to cancel the load control aspect of their electricity contract
- information privacy when load control is offered by distributors, retailers or third parties
- for how long should arrangements about load control run? (e.g. for one year? For the life of the contract?)
- might load control be part of a standing offer?
- what safeguards should be considered for customers on life support.



## 3 | VERIFYING BILLS

In the *Regulatory Review – Smart Meters Final Decision*, the Commission noted the importance of customers being able to verify their bills. This section addresses two proposals to further support this principle, and raises issues on which stakeholder submissions are sought.

### 3.1 Readings at meter changeover

The Final Decision included changes to make it easier for smart meter customers to monitor their electricity usage, including provision of extra information on their bills. In the 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 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.

The Commission noted that options to achieve this include requiring distributors to:

- 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 determined to review formally the suggestion of requiring a final reading to be left at the premises at the time of meter changeover.

#### **Issues for comment**

The Commission seeks stakeholder comments on:

- whether distributors should be required to provide customers with a copy of the final accumulation meter read at the time when the basic meter is replaced with a smart meter, and
- how this might be done.

### 3.2 “Start” readings on smart meter bills

The 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. Industry participants sometimes refer to this as an “end index read”.

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.

In the Final Decision, the Commission also supported in principle a request from the former Minister for Energy and Resources that the Commission require retailers to also include in customers’ bills the consumption read corresponding to the start of the billing period. Industry participants may refer to this a “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, a formal review regarding the implementation of this proposal is being undertaken now.

#### **Issues for comment**

The Commission seeks stakeholder comments on:

- the desirability of including in smart meter customers’ bills the consumption read corresponding to the start of the billing period and
- the practicality of including in smart meter customers’ bills the consumption read corresponding to the start of the billing period.

## 4 | MAKING A SUBMISSION

Submissions to this review are preferred in electronic format and should be provided to the Commission by 4 February 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](http://www.esc.vic.gov.au)).

### **Next steps**

The milestones for the review are:

- Submissions to the Issues Paper due by: 4 February 2011
- Draft Decision: 11 March 2011
- Submissions to Draft Decision due by: 8 April 2011
- Final Decision 6 May 2011