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REGULATORY REVIEW – SMART METERS

ISSUES PAPER

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CHAIRPERSON'S OVERVIEW

The Victorian Government requires the electricity distribution businesses to install smart meters in all customers' premises over the period 2009 – 2013. By 30 June 2011, 25 per cent of customers are to have a smart meter installed, progressively increasing to 100 per cent by 31 December 2013.¹

The Essential Services Commission (the Commission) is reviewing the energy regulation for which it is responsible to ensure it continues to promote the interests of customers and provides clear obligations for distributors and retailers when dealing with electricity customers with smart meters.

The implementation of smart meters has raised a number of issues for customers, which are not the responsibility of the Commission and will not be addressed in this review. In particular, the review will not be considering the costs of the meters or pricing and time-of-use tariff issues, except to ensure that customers are provided with consumption and pricing information that is transparent, timely and useful.

The Commission currently oversees regulations that ensure information is provided to customers for a range of uses – to help them understand the nature of their bill, how much power they are consuming, how they can confirm their bill is accurate, and how to make choice of retailer in the competitive market.

Customers will need this same information when their bills are based on time-of-use tariffs. However, their bills will not be based on the manual meter reads every quarter, but on electricity usage measured and recorded every half hour. The information will be collected remotely by two way communications. In future, new technologies also will be available in the home to help customers understand their electricity usage more directly.

In this review, we look at what information customers may need in the future as these technologies become operational.

We are not proposing an overhaul of the regulations or of the regulatory framework. Rather, this review seeks to take account of the operation of smart meters in the Victorian market. We have reviewed all the current regulations against the following guiding principles –

- the regulatory amendments will not limit or constrain the innovation that is available from smart meters and will continue to facilitate competition in the Victorian energy retail market
- the regulatory framework assists customers to benefit from smart meters, by ensuring that consumption and pricing information is transparent, timely and useful

¹ Victorian Government Gazette, No S 314, Tuesday 25 November 2008

- customers, particularly vulnerable customers, will continue to be protected by the regulatory framework
- the financial costs of supporting new systems and processes are properly allocated between retailers and distributors, where appropriate.

The Issues Paper canvasses a number of options. In some areas, we have proposed a regulatory amendment, where it appears straightforward. In other areas, we have posed questions or issues that are designed to assist the Commission to decide what regulatory amendments may be required.

We ask interested parties to review the discussion in chapter 3 and Appendix A of this Issues Paper and to provide comments to us by 21 May 2010. Your submissions will directly inform our Draft Decision.

Dr Ron Ben-David
Chairperson

GLOSSARY

AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMI	Advanced Metering Infrastructure
CPP	Critical Peak Pricing
DB	Electricity Distribution Business
DPI	Department of Primary Industries
EI Act	Electricity Industry Act 2000
ERC	Energy Retail Code
ESC	Essential Services Commission
ESC Act	Essential Services Commission Act 2001 (Victoria)
ESV	Energy Safe Victoria
EWOV	Energy and Water Ombudsman (Victoria)
IMRO	Interval meter roll out
MCE	Ministerial Council on Energy
NEM	National Electricity Market
SCO	Standing Committee of Officials
TOU	Time of use
UoSA	Use of System Agreement

1.1 What are smart meters?

Smart meters use digital technology to allow some new features to be associated with the metering of electricity. Smart meters measure and record the customer's electricity usage each half hour and this information is collected remotely by two way communications. This information, as well as new technologies such as in-house displays, can assist customers to better determine how and when to consume power in order to manage their bills.

New features of the meters that are not available with the existing accumulation meters include the ability to remotely connect and disconnect power when moving house. This means that a technician will not always be required to visit the premises and will assist customers to be more quickly connected or disconnected on request and at lower cost.

Smart meters also allow the distribution company to locate outages and restore power more quickly.²

The regulatory framework overseen by the Essential Services Commission (the Commission) deals with many functions associated with the existing accumulation meters. These regulations apply to distributors, retailers and customers and are being reviewed against the new features provided by smart meters, consistent with the powers and functions of the Commission.

1.2 Regulatory powers of the Commission

The structure of the National Electricity Market (the NEM), which includes Victoria, is complex, with a number of regulatory bodies responsible for different aspects of the market. This complexity will increase for a period as the energy regulation further transitions from state based regulation to nationally based regulation.³

From 1 January 2009, the Australian Energy Regulator (AER) assumed responsibility for economic regulation of the electricity distribution businesses, including setting the distribution prices and charges. This includes setting the

² More information about smart metering, its capability and the rollout can be obtained from the Department of Primary Energy (DPI) website at www.dpi.vic.gov.au/smartmeters or the national smart meter project website at http://www.ret.gov.au/Documents/mce/emr/smart_meters/default.html.

³ When the national arrangements are complete the Australian Energy Market Commission (AEMC) will be the rule maker and the Australian Energy Regulator (AER) will be the regulator for distribution and retail functions.

metering charges to take account of the smart meter implementation for the period 2009-2011.⁴

Relevant to this review, the Commission's current powers under the *Essential Services Commission Act, 2001* (ESC Act) are:

- Rule making for the Victorian distribution businesses, but not the enforcement of the rules or the economic regulation of the distribution businesses,⁵ and
- Rule making and rule enforcement for the Victoria electricity retail sector including the licences, codes and guidelines made by the Commission

1.3 Why review the electricity regulation now?

In the monopoly distribution sector the regulation establishes power connection, quality and other technical standards, including some aspects of metering, as well as ensuring a customer's right of access to the supply of power.

In the retail sector, the regulation is designed to enhance competition and generally to promote the interests of customers in the provision of an essential service. Specific protections assist low income and vulnerable customers to maintain connection to supply.

These regulations were put in place in 2002 when all customers became eligible to choose their energy retailer. They were designed for an energy market where the accumulation meters are manually read and information on electricity use is provided to most customers only on their quarterly bills.

The Victorian Government requires the electricity distribution businesses to install smart meters in all customers' premises over the period 2009 – 2013. By 30 June 2011, 25 per cent of customers are to have a smart meter installed, progressively increasing to 100 per cent by 31 December 2013.⁶

It is the new capability of the meters, for instance that metering data can be read daily, that connection and disconnections can be enabled quickly and remotely, that gives rise to the review. That is, the existing regulation may be considered ambiguous or no longer relevant when taking into account the operation of smart meters.

The Commission is aware that the national regulatory framework will ultimately include protections for customers with smart meters. To avoid unnecessary duplication, the review therefore will focus on the regulatory amendments, to

⁴ See Final Determination: Advanced Metering Implementation at <http://www.aer.gov.au/content/index.phtml?itemId=726410>. The AER is currently reviewing the distributors' submissions for 2011-2015, which will include smart metering charges.

⁵ From 1 January 2009, the Australian Energy Regulatory has responsibility for distribution economic regulation, including the regulation of AMI metering charges.

⁶ Victorian Government Gazette, No S 314, Tuesday 25 November 2008

promote the interests of customers and to facilitate the efficiency of the market, which are essential to support the imminent operation of smart meters in Victoria.

Consumer advocates want to ensure that the regulation is robust to facilitate customers benefiting when smart meters are fully operational.⁷ Some of their concerns arise from the pending introduction of time-of-use pricing associated with smart meters.

The Victorian Government recently announced a “moratorium” on the introduction of time-of-use pricing:

“Time-of-use pricing is where customers are charged different rates at different times of the day. This pricing structure will help Victorians control their energy costs but we need to make sure the changes are fully understood across the community before they are introduced. ...Electricity distribution businesses have agreed to delay the introduction of time-of-use pricing until more work is done to protect vulnerable Victorians.”⁸

We therefore have looked at how the regulations can assist customers to be better prepared when time-of-use tariffs are introduced, taking into account the need to provide sufficient lead-time for retailers and distributors to implement any necessary systems and process changes.

1.4 What is not covered by the review

There are a number of matters which will not be considered in this review, either because they are being addressed elsewhere or it is premature to consider a regulatory approach at this early stage. Specifically the review will not address:

- The distributional impacts of time-of-use tariffs on customers as this is being considered by the Victorian Minister for Energy and Resources’ Customer Consultation Working Group⁹
- Possible regulatory approaches to new technology designed to enhance the operation of smart meters, for example, demand management technology and supply capacity control. This is because these developments have not sufficiently progressed for appropriate regulatory responses to be considered
- Pricing and tariff issues, beyond the notification, information and billing requirements of the regulatory framework, particularly the Energy Retail Code and the Marketing Code of Conduct, for which the Commission is responsible.

⁷ Refer to submissions at <http://www.esc.vic.gov.au/public/Energy/Consultations/Smart+meters+regulatory+review/Smart+meters+regulatory+review.htm>

⁸ Media Release dated 22 March 2010 from the Minister for Energy and Resources at <http://www.premier.vic.gov.au/component/content/article/9853.html>

⁹ Media Release dated 22 March 2010 from the Minister for Energy and Resources at <http://www.premier.vic.gov.au/component/content/article/9853.html>

Not all regulation requires amendment now and some will not require amendment at all. This review will enable all relevant energy regulation to be amended by 31 July 2010 and that a timeframe is established for a further review and amendment of the regulation as required.

The proposed timeframe will be informed by submissions to this Issues Paper and will be confirmed in the Draft Decision.¹⁰

1.5 Structure of the Issues Paper

This paper provides an opportunity for interested parties to comment on the issues raised or the proposals for regulatory amendments, before the Commission makes its Draft Decision.

The paper sets out the following:

- section 2 details the principles which are guiding the review and the regulatory instruments being considered
- section 3 discusses those matters which are currently regulated, and which are sufficiently import to customers or industry parties to discuss in more depth
- section 4 asks for comments on those matters which have not been addressed in this paper, but should be considered in the review.
- Appendix A sets out all the regulations which the Commission considers should be amended now or in the medium term, on which interested parties are invited to comment.

There are two accompanying background papers:

- Background Paper 1: Victorian Energy Regulations – Smart Meters
- Background Paper 2: Review of Other Jurisdictions – Regulations and Smart Meters

1.6 Making submissions

Submissions in electronic format are preferred and should be provided to the Commission by 21 May 2010:

By email to;

smartmeters@esc.vic.gov.au

Or mailed to:

¹⁰ The Commission noted in the Final Report: Review of Wrongful Disconnection Payment, January 2010 that it will address the relevant clauses in the Energy Retail Code which address the obligation to offer a second instalment plan prior to disconnection (and clause 15.2(b) as discussed in section 3.2.2). The Commission will consult separately on these clauses and propose a Draft Decision with the Draft Decision on these smart meter matters in June.

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).

2.1 Guiding Principles

The Commission's principal objective is to promote the long term interests of Victorian consumers. Further, in performing its functions and exercising its powers, the Commission must have regard to the price, quality and reliability of essential services.

The Commission must also have regard to the benefits and costs of regulation for customers and the regulated entities, and to ensure there is consistency in regulation between States and on a national basis.¹¹

From these objectives, the Commission proposes that the following more specific principles should guide this review:

- the regulatory amendments will not limit or constrain the innovation that is available from smart meters and will continue to facilitate competition in the Victorian energy retail market
- the regulatory framework assists customers to benefit from smart meters, by ensuring that consumption and pricing information is transparent, timely and useful
- customers, particularly vulnerable customers, will continue to be protected by the regulatory framework
- the financial costs of supporting new systems and processes are properly allocated between retailers and distributors, where appropriate.

Issue for comment

Are there other guiding principles to which the Commission should give consideration in this review?

2.2 Review scope

The review will concentrate on those regulatory obligations which directly impact on the relationships between distributors and their customers, retailers and their customers and distributors and retailers.

The regulations in the following instruments will be reviewed:

¹¹ *Essential Services Commission Act, 2001*, section 8.

- Distribution and Retail Licences;
- Use of System Agreement;
- Electricity Customer Metering Code;
- Electricity Customer Transfer Code;
- Electricity Distribution Code; and
- Energy Retail Code;
- Code of Conduct for Marketing Retail Energy in Victoria; and
- Guideline No 19: Energy Industry – Energy Price and Product Disclosure – offer summary requirements

The review will also consider approaches in other jurisdictions, specifically to inform the discussion in section 3. Regulatory frameworks in Texas, Ontario and California will be examined for lessons learnt and regulatory approaches which could be considered for adoption in Victoria. These jurisdictions were selected because of their similarity to Victoria, including the scope and level of retail competition, the mandated or voluntary rollout of smart meters and the application of TOU pricing.

We will also take account of the outcomes of the customer trials implemented by EnergyAustralia in New South Wales.

2.3 Consultation

Consistent with our *Charter of Consultation and Regulatory Practice*, the Commission will undertake a wide ranging consultation process in this review.

We published an Open Letter in early February 2010, asking for views from interested parties on what issues should be addressed in the review. Fourteen submissions were received from retailers, consumer advocates, the Energy and Water Ombudsman and members of the public.¹²

Some submissions raised matters which are outside the scope of this review. Those issues raised which directly address the regulations under review have been taken into account.

The review will consider the following papers:

- St Vincent de Paul Society, February 2010: A National Report on Customer Protections and Smart Meters
- The National Energy Customer Framework (NECF) developments including its smart meters customer protection paper.¹³

¹²

<http://www.esc.vic.gov.au/public/Energy/Consultations/Smart+meters+regulatory+review/Smart+meters+regulatory+review.htm>

¹³ Ministerial Council on Energy Standing Committee of Officials, August 2009: Smart Meter Customer Protection and Safety Review – Draft Policy Paper One

We held a workshop on 17 March 2010, to explore further with interested parties specific areas of concern. Again, the views expressed at that workshop have been taken into account in this Issues Paper.

The following activities will be undertaken to complete the review by 31 July 2010:

- Issues Paper released, setting out preliminary issues and preliminary views for consultation.
- 13 May 2010 – public forum
- 21 May 2010 – submissions close
- Mid June 2010 - Draft Decision and proposed regulatory amendments published for consultation
- 31 July 2010 - Final Decision and regulatory amendments published
- 31 July 2010 - timetable for further review published.

3 | KEY ISSUES FOR CONSIDERATION

All the regulations on which the Commission is seeking comment in this review are set out in Appendix A. This section discusses those regulatory matters that have arisen as key issues for customers and industry participants in the consultations to date.

Most concerns to date directly are related to the impact on customers' capacity to understand and benefit from the operations of smart meters. We have also reviewed the regulatory framework around network monthly billing which is known to be a matter of pressing importance between the distributors and retailers.

3.1 Vulnerable customers

The current legislation and regulations place a number of obligations on retailers to assist customers to remain connected to supply. The EI Act requiring retailers to implement financial hardship programs, combined with regulatory obligations to provide instalment plans and other assistance, ensure that low income and vulnerable customers have an energy safety net.

The regulations also limit the amounts that retailers can recover from customers if they fail to send bills or do not bill accurately. Disconnection from supply should always be a last resort option for retailers and additional steps must be taken by retailers prior to disconnecting customers in hardship.

We have proposed in section 3.3.2 that disconnection warnings for customers be amended so that customers are aware they may be remotely disconnected. We have also asked whether additional steps should be taken for customers prior to this disconnection.

Other than these enhancements, the Commission cannot identify any additional regulation within its powers to further protect vulnerable customers with smart meters.¹⁴

Issue for comment

Are there enhancements to the current regulations which are necessary for vulnerable customers arising from the implementation of smart meters?

¹⁴ The Commission is currently reviewing the retailers' financial hardship programs – see <http://www.esc.vic.gov.au/NR/exeres/0365B775-CD7E-4005-85FD-4231C5EC18A8.htm>. Other recommendations may arise from this review, but it is not expected that this will be impacted by the implementation of smart meters.

3.2 Information and informed consent

Currently billing information is manually collected on a quarterly basis for most small customers in Victoria. Quarterly meter reads are then used as the basis for calculating customer bills. Although tariffs can vary, the majority of Victorian customers are currently on an inclining block tariff structure that charges customers more for consumption in excess of the first block.

With smart meters, a range of new time-of-use tariffs are expected to be developed. These tariffs may be based on consumption or demand in preset daily or seasonal time periods (time-of-use pricing), dynamically set according to network congestion or wholesale energy prices (dynamic pricing), or vary each half-hour with the wholesale market (real-time pool pricing).

In the short to medium term, it is expected that most tariffs offered to customers will be time-of-use (TOU) tariffs. The discussion in this Issues Paper works from this assumption.

A fundamental issue for customers in benefitting from smart meters is that relevant information is transparent and accessible, and sufficiently useful to them in their decisions about consuming power.

The regulations currently address how information is provided to customers for a range of uses – to help them understand the nature of their bill, how much power they are consuming, how they can confirm their bill is accurate, and how to make choice of retail in the competitive market.

Customers will require the same information when their bills are based on TOU tariffs. Their information requirements will vary depending on whether they are:

- **Reviewing the bill** – Customers will need to be able to reconcile their usage with the charges on their bills. Provision of key information on the bill may assist customers to have more confidence in the reliability of their bills. Customers will also need to know when and if their tariffs will vary through the life of their contract.
- **Managing daily consumption and costs** – Customers will need to know how the price of their electricity changes over the day, and ideally, how much they are using over each period. They will need to know what components influence their price and behaviour and have ready access to information which is timely and useful. The information should be available at no or low cost.
- **Shopping around for a better offer** – Customers will need to know whether a given offer would make them better or worse off and how to compare the benefits of the offers between retailers.

3.2.1 Reviewing the bill

Verifying the accuracy of the bill

The regulation currently requires that the bill must show the electricity consumption in each period that a tariff applies and if the meter is an accumulation meter, the previous and current meter readings.¹⁵

Customers sometimes check their meter upon receiving their bill to confirm that the meter reading for which they are billed roughly corresponds to their current meter reading. They may also review their previous bill to check that the last reading corresponds to the first reading of their current bill, thus providing some evidence that the billing quantities are correct.

If the bill is based on readings from an interval meter, it is not mandatory to show a “previous and current read”. This is because the consumption that is billed is derived from the half hourly data collected from the meter and not from a reading of a register from the meter as it is with an accumulation meter.¹⁶

Some retailers who have customers with manually read interval meters with TOU tariffs have shown on their bills the “previous read” starting from zero. This approach has led to some confusion and complaints over the past few years while interval meters were being installed.¹⁷

It is important that customers are able to verify their usage against their bill when they have a smart meter. We have looked at two aspects of the information which could be provided on the bill to meet this objective.

1. Consumption by individual tariffs

To enable customers to reconcile their charges against their consumption, bills for smart meters should show the consumption for each tariff segment, for example, for a time of use tariff the total consumption for the peak period and other tariff periods for the billing period. The total consumption for the current period should also be shown (see Figure 1).

This is consistent with the current requirement under ERC clause 4.2 (g) and also with the policy position proposed in the national framework consultations.¹⁸

¹⁵ ERC clause 4.2(g)

¹⁶ ERC clause 4.2(h)

¹⁷ EWOV has advised of a number of customer complaints since the installation of manually read interval meters for small customers.

¹⁸ *Smart Meter Customer Protection and Safety Review – Draft Policy Paper One*, Ministerial Council on Energy Standing Committee of Officials, August 2009, p 16. SCO proposes that retailers provide customers on time related tariffs with consumption data for each tariff segment (e.g. peak, off-peak, shoulder) on their bill to enable them to reconcile their bill charges.

Figure 1 Minimum Tariff and Consumption Requirements on the Bill¹⁹

Meter ID	Consumption	X Tariff ²⁰	= Cost
Off Peak Energy ABC1234	1,302.3 kWh	7.4000 c/kWh	\$96.37
Shoulder Energy ABC12345	2,616.6 kWh	12.800 c/kWh	\$334.93
Peak Energy ABC123456	1,424.7 kWh	32.400 c/kWh	\$461.60
Supply Charge	93 days	42.000 c/Day	\$39.06
Total Electricity	5343.6 kWh		\$931.96

2. Total accumulated consumption -

With TOU tariffs customers are likely to be more interested in consumption in tariff periods rather than just the total consumption. Nevertheless, we do need to consider whether the total accumulated consumption reading should continue to be included on customers' bills.

Customers can still get a meter reading from their smart meter, which shows the total accumulation consumption since the meter was installed. It is understood that the industry protocols do not require this data to be provided to the retailers, but it nevertheless can be readily obtained by the meter data providers for inclusion on the bill.

There are a few options for how this information could be included on customers' bills:

- the total accumulated consumption reading as at the bill date
- the total accumulated consumption reading as at the bill date and at the previous bill date (this would resemble the "current" and "previous" reading)
- the total consumption for the billing period is added to the "previous" total accumulated usage, which customers could compare with their reading from the smart meter.

We note retailers' concerns that the total accumulation consumption reading on the meter may become increasingly remote from the cumulative consumption figure calculated by the retailer (which is used for billing purposes) due to the effects of estimations and substitutions. This is considered below.

¹⁹ Until time-of-use tariffs are introduced, it is not known how many tariff periods there will be in any one day. Currently, there are at least three – peak, off-peak and shoulder periods.

²⁰ These tariffs are based on tariffs applied by EnergyAustralia. They do not represent the Commission's views on what time-of-use tariffs may be applied in Victoria.

Issues for comment

Will the proposed approach to including the consumption by tariff segment, total consumption and tariffs for the billing period ensure customers maintain their ability to confirm the accuracy of the bill?

What are the implications for cost, feasibility and information value to customers of the options for the meter's total accumulated consumption on the bill?

Estimated and substituted data on bills

The Energy Retail Code requires retailers to indicate whether the bill is based on a reading or is an estimated bill or whether it is based on any substituted data.²¹

For accumulation meters estimated reads are used when the meter is not able to be read perhaps due to the lack of access. Generally the estimate will be replaced on the next bill by an actual meter read. A substituted reading occurs when the meter is accessed but the metering data subsequently cannot be used, perhaps due to meter failure. In such a situation the substituted data can never be replaced by actual data.

a) Estimates

Currently, retailers are only required to show that a bill is estimated when it is wholly based on an estimate. That is, for existing interval meters, if there are some estimates included in the data it is not required to be shown as an estimated bill.

Historically, the main purpose for showing whether a bill is estimated has been to alert customers that the meter has not been read and therefore the bill might be higher or lower than expected. This helps customers to understand why the bill may vary from expectations and that it will be adjusted once an actual meter read is obtained. It also reminds customers of their obligation to provide access to the meter for reading, if this was the reason for the estimated bill.

The likelihood of estimated bills with smart meters should be minimal when all the features of these meters are fully employed. This is because the meters will be read daily by the distributor so any inability to read the meter due to access or missed reads should be eliminated.

Some consumer groups consider that the practice of issuing bills based on estimates be abolished, or at least reviewed, in a smart meter environment.²² Retailers highlight that the definition and materiality of estimates needs review to take account for the more sophisticated smart meter technology.²³

²¹ ERC clauses 4.2(e) and (f)

²² Refer submissions from SVDP and CUAC

²³ Refer submissions from Red Energy, Simply Energy and Origin Energy

We believe it is too early to decide that estimates should not be allowed at all in billing because the capability of the meters and systems are not yet fully understood or implemented.²⁴

Under remote meter readings it will no longer be necessary to indicate to customers that the bill is estimated to encourage customers to provide access to their meter. However, there may still be some circumstances where all or part of customers' bills will be estimated, and these circumstances should require the bills to be reissued once the actual data is obtained.

Options for requiring that customers are advised that their bills are estimated could include;

- Only when the bill is wholly an estimate, as currently required under regulation
- Where there is a combination of estimates and actual readings
- Determining a materiality threshold, such as only where 2% or more of the interval data is estimated.

Issue for comment

Comments are sought on when customers should be advised that their bill is estimated.

Comments are also sought on whether there should be some default tariff arrangements impacting distributors, retailers and customers when bills are estimated.

b) Substitutes

Currently retailers are required to indicate when any substituted data has been used for billing purposes.

Substituted data is only required when the data collected cannot be used or cannot be collected due to major meter failure. Therefore, the incidence of substituted data being used for customer billing should be very small. This data, however, cannot be replaced at a later time in an adjusted bill.

If substituted data is required because the meter has failed, the distributor will be alerted and will be required to repair or replace the meter. Customers therefore should be advised that their bills in these circumstances are based on substituted data, as is the case with the current regulation

The options for the use of substitutes could include;

- When the bill is based on any substituted data, as currently required under regulation

²⁴ Until end 2013, under a derogation to the National Electricity Rules (Chapter 9.9B), Victorian smart meters are classified as type 5 or type 6 which means data need only be delivered to the market quarterly.

- Where the bill is based wholly on substitutes
- Only where 2% or more of the interval data is substituted.

Issue for comment

The proposal is to retain the current requirement that customers be notified that any part of a bill is based on substituted data.

3.2.2 Managing daily consumption and costs

Customer billing cycle

TOU pricing will significantly impact customers' information requirements for effectively managing their electricity costs. For example, under TOU pricing, energy costs may be driven less by overall consumption than by peak period consumption. Managing peak period consumption may offer the greatest cost saving opportunity per unit of energy saved or shifted.

Customers will require a clear understanding of when various prices apply, and regular feedback regarding their usage in each pricing period. Tools will be made available to assist customers, but the bill is likely to remain the default tool for most customers.²⁵

A key finding from the Ontario pricing study was that Ontario customers believed that a monthly bill was essential for effectively managing their electricity costs.

The current Victorian regulation requires that customers on deemed or standing offer contracts must be billed at least every three months, unless explicit informed consent for a different contractual arrangement or billing cycle is given.²⁶ Some submissions to the Commission's Open Letter indicated support for customers' billing cycles being shorter than three months (say monthly) so that they are provided with more timely information. They would be prepared to consider other options to customers' explicit informed consent (opt-in consent) being obtained.

For consumer advocates this support is subject to the current collection cycle timing remaining the same as the existing regulation. That is, customers have a minimum of 12 business days to pay the bill before debt recovery action is initiated.

Some retailers consider they should not have to continue to obtain a customer's explicit informed consent to a change in their billing cycle.²⁷

More frequent billing may increase costs to retailers due to a three-fold increase in bill processing and associated service costs. These costs are expected to be offset

²⁵ See the discussion under Access to Metering Data on page 22

²⁶ ERC clause 5.1

²⁷ See submissions from Red Energy and Simply Energy and St Vincent de Paul Society, February 2010: A National Report on Customer Protections and Smart Meters

by the reduction in working capital costs and costs associated with managing bad debt driven by relatively large, quarterly bills.²⁸

Issues for comment

The current regulations for explicit informed consent may be seen to be acting as a barrier to customers accessing more timely information upon which they could better manage their costs. Views are sought on:

- Whether an 'opt-out' approach to monthly billing for deemed or standing offer customers is appropriate?
- What are the implications for the costs and timing of the current collection cycle if customers move to monthly billing?
- How should any changes to the customers' current billing cycles be implemented?

Graphical information on the bill

The current regulation assists customers to understand their consumption quite simply. That is, retailers are required to provide customers with graphs of the last 12 months of consumption by billing period, and a year-on-year comparison of current billing period consumption. Graphical information can provide customers with a more readily understood basis for understanding and managing their electricity consumption, which may lead to lower overall bills.²⁹

TOU tariffs will mean that this simple consumption graph is unlikely to be adequate given the wide range of potential tariff structures that may emerge over the next few years. For example, the graphical needs of customers on a TOU tariff may be very different to customers on dynamic tariffs.

With 30 minute interval data, it is possible to provide customers with daily bar graphs or other graphical approaches over the billing period.

This review has examined customer pricing trials in California, Texas and Ontario, which have reported that the display of their daily peak, shoulder and off-peak period consumption was essential for the effective management of electricity costs.³⁰

EnergyAustralia currently has over 200,000 small customers on a TOU tariff in their network area in NSW. EnergyAustralia increased the information provided to their customers and included on the bill the customer's consumption history by tariff component (that is, peak, shoulder and off-peak) for the period on a monthly basis. This presumably was in response to customers' requests for further information.

²⁸ The relationship between retailers' monthly billing and distributors' monthly billing is discussed in 3.4.

²⁹ ERC clause 4.4 - the periods to be graphed are either quarterly or monthly, depending on the billing cycle

³⁰ Background Paper 2: Review of Other Jurisdictions – Regulations and Smart Meters

Figure 2 Example of an EnergyAustralia bill

USAGE BREAKDOWN		
Peak	271 kWh	22.27%
Shoulder	673 kWh	55.27%
Off Peak	274 kWh	22.47%
<hr/>		
TOTAL ENERGY	1,219 kWh	
<hr/>		

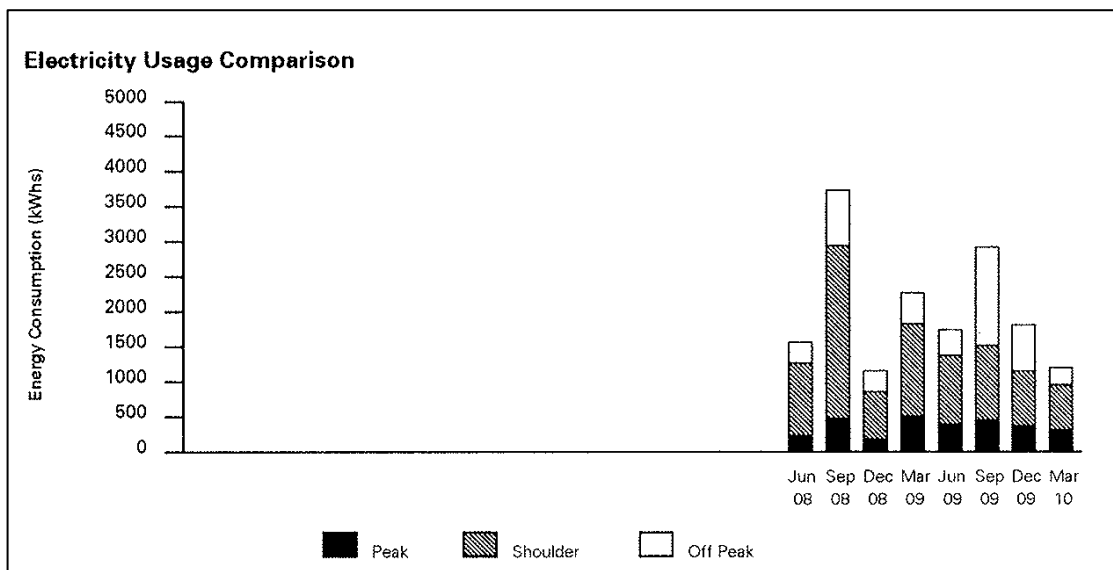
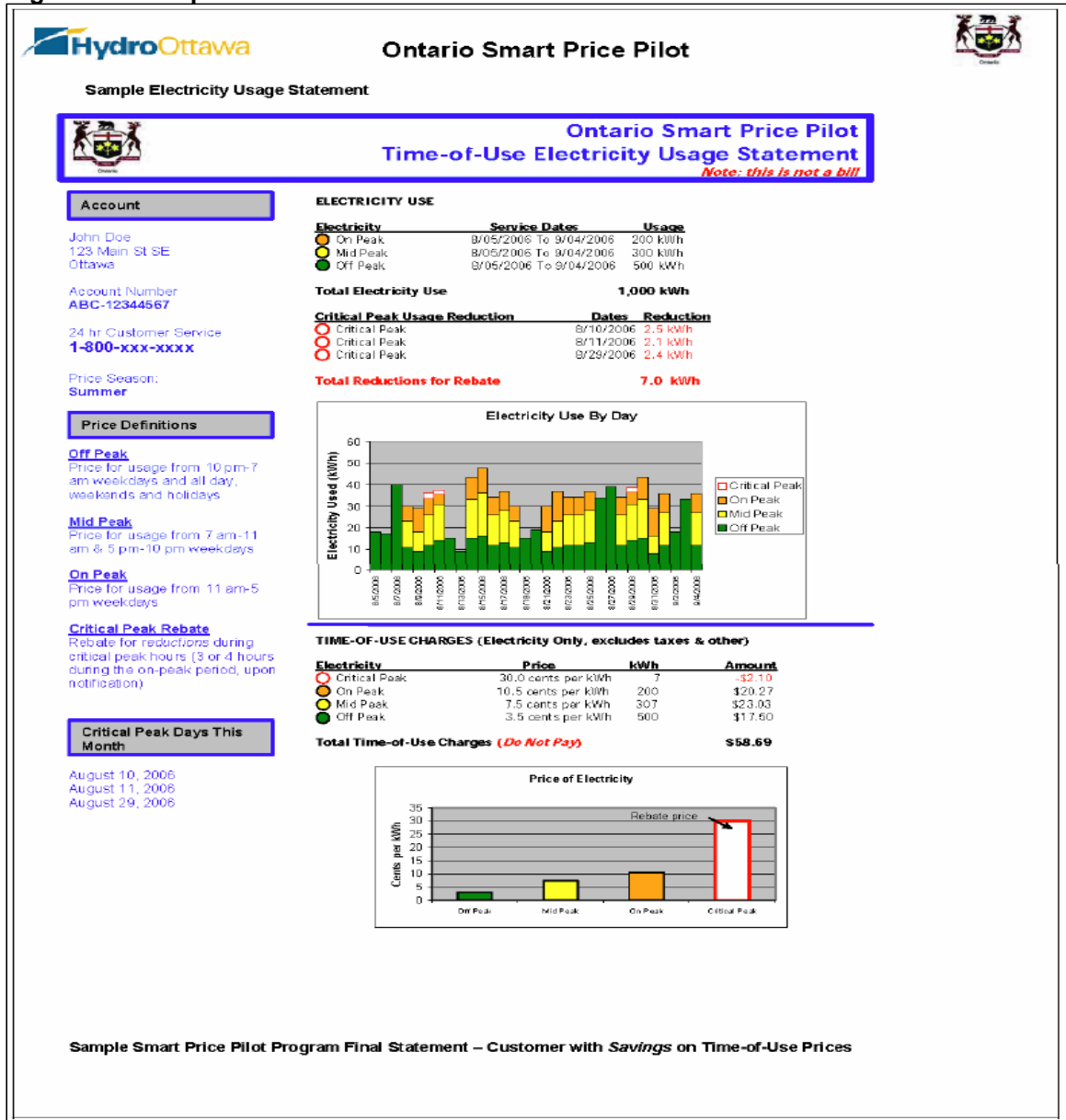


Figure 3 shows a sample bill from Ontario’s smart price pilot which involved a critical peak price element. A feature of this bill is the graphical way in which the consumption is presented. That is, the graph shows the daily consumption in bars split to show the tariff components that have separate applicable rates. This form of graph indicates clearly when consumption is high and when price is high, leading to higher electricity charges.

Figure 3 - Example of a Bill from the Ontario Smart Price Pilot³¹



³¹ Ontario Energy Board Smart Price Pilot Final Report, July 2007

TOU tariffs are expected to be the tariff applied to most Victorian small customers in the medium-term. That is, if customers are on a two part TOU tariff, then the bill should include monthly graphs of both periods (or three part, if shoulder tariffs are included), even if these customers are billed quarterly.

Without regulation, customers could be given a graph of quarterly or monthly totals, which may reduce their ability to understand and manage their electricity costs or to consider alternative offers from retailers.

Issues for comment

The proposal is to require retailers to provide customers with a graph similar to that used by EnergyAustralia or Ontario Energy Board when time-of-use tariffs are introduced for customers with smart meters.

What are the implications for incremental costs or barriers to innovation of this approach?

Given the customer feedback from overseas pricing pilots, and the potential move to monthly billing, mandating daily periods may also be beneficial for customers. Comments are invited on this approach.

Unbundling tariffs and charges on the bills

Customers can request details of their network charges, retail charges and other charges,³² but most electricity charges are provided to small customers on an aggregated basis, by fixed and variable components. Some retailers have recently begun identifying metering charges separately on customer bills (that is, two fixed components), presumably to provide customers with more information regarding the drivers of bill increases.³³

Customer bills are most impacted by the costs associated with growing network peak demands and generation, which suggests that customers should see and be charged directly for these distribution and generation costs.

There is significant mandatory unbundling of tariff components on customer's bills in overseas jurisdictions, that is, the specific network, retail and other charges are detailed. This appears to be a reflection of the concerns that customers are assisted to understand the basis of their bills at a detailed level, and to better manage those components that customers can potentially influence.

³² ERC clause 4.3

³³ The Commission has recently examined Origin Energy's delineation of metering charges and supply charges on customers' bills – see reference at <http://www.esc.vic.gov.au/public/Energy/Regulation+and+Compliance/Reports+and+Investigations/Origin+energy+metering+charges/Origin+Energy+Metering+Charges.htm>

The Victorian regulation could be amended so that retail bills separate out distribution charges to show the network tariff structure and the wholesale costs to reveal customers' actual energy purchase costs.³⁴

Issues for comment

Greater transparency through information to customers is a prerequisite for customers to benefit from the introduction of smart metering and unbundling could be considered to deliver part of this information. However, some key questions are:

- Would customers gain any information from unbundling of the distribution charges if the retailer does not base its tariff on the distributor's tariff structure?
- Would it be helpful or not for customers to have some charges unbundled, but not others?
- Does unbundling of network charges and tariff alignment have the potential to reduce retailer flexibility in tariff offerings?
- What are the costs, benefits and feasibility of greater unbundling? Should regulation go beyond requiring the unbundling of retailer and distribution cost sub-components of wholesale and metering costs?

Notification of variations to tariffs

The regulations require that customers' explicit informed consent must be given to a change in tariff associated with a market contract. Customers' agreement is not required for standing contract tariff changes.³⁵ Both the legislation and the regulation require the retailer to advise the customer of any tariff change at least by the next bill after tariff change takes effect.³⁶ The legislation applies only to customers on standing contracts.

The regulation applying to changes in standing offer tariffs, and the notification requirements, were predicated on accumulation meters being in place and that these meter limited the tariff options to basically a single tariff (and perhaps off-peak for hot water and slab heating). It should not be assumed that it was the intention of the regulation to allow structural tariff changes, such as might occur with TOU tariff structures, without the agreement of customers.

³⁴ Network charges may need to separately identify metering charges if they are to be accurately displayed on the retail bill.

³⁵ ERC s20.1 and 21.1(b)

³⁶ Section 35Cb) of the EI Act and ERC clause 26.4(b)

The Commission recognises that an objective of the Victorian Government is that customers ultimately have choice of a range of new TOU tariffs that are enabled by smart meters, while continuing to have choice of retailer. The consequences of a customer with a smart meter not agreeing to the TOU tariff offered by a retailer that is based on the new network TOU tariff are unclear and could increase the financial risk to retailers.

Nevertheless, the Commission does not consider that the Energy Retail Code should require customers to shift from standing contract single-rate or two-rate tariffs to a TOU tariff immediately and without consent. The Commission has raised this matter with the DPI and it is understood the implications are being considered.

On the assumption that customers provide consent to tariff variations during their contract period, the Commission no longer considers it appropriate that notice of these variations is provided "...as soon as practicable and in any event no later than the customer's next bill." Customers should not receive notification that their tariff has increased at the same time that the increase is applied to their bill.

The Commission can amend the regulation for customers on market contracts, but cannot increase the obligation on retailers in respect to notification of tariff variations for customers on standing contracts. The Commission understands the DPI is also reviewing this issue.

Issue for comment

The Commission considers that any changes to the regulation on the notification of tariff variations should wait for the outcomes of the Victorian Government's deliberations, so that there is consistency between customers on market contracts and those on standing contracts.

Nevertheless, interested parties may wish to submit their comments in regard to this matter.

Access to historical billing data

Current regulations require that retailers provide customers (including former customers) with historical billing data held by the retailer. This right of access includes one free request per year for data within the last two years. Retailers are required to use best endeavours to provide the data within 10 business days.³⁷

This regulation was designed for ad-hoc requests from customers, who may have a billing dispute with their retailer or require historical information to develop a consumption profile for obtaining a market offer from a retailer.

Overseas, Texas has a very similar two years requirement for smart meters and Ontario also requires billing level information and hourly data to be available to customers for the past two years.³⁸

³⁷ ERC s27

³⁸ Rules and Regulations: Issuance and Format of Bills. §25.25 (e) Record retention.

The existing regulation would appear to continue to satisfy customer's needs to reconstruct their bill. That is, the historical data supplied by the retailer would be the consumption data for each tariff component aggregated for each billing period. The Commission notes however that the use of the term "historical billing data" needs to be more clearly defined for this purpose so that it is differentiated from other data that might be available from smart meters with different requirements (see discussion on Access to metering data below).

Issue for comment

Will the regulation of the provision of billing level data continue to meet the needs of customers to allow them to reconstruct their historical bills in a smart metering environment for ad-hoc or occasional purposes?

Access to metering data

Smart meters will record consumption information each half hour and this data may be much more useful to customers in analysing usage patterns than data that just corresponds to the billing period – whether that billing period is monthly or quarterly.

Some customers may not want to use the newly available information or not have access to a computer or the software required to be able to use the data effectively. For the data to be useful, it must be able to be provided:

- soon after the consumption was recorded; and
- given the increased volume of data, supplied to customers in form that enables easy analysis.

There is newly developing technology to assist customers. In-house displays accessing data directly from the meter via a wireless link means that information will be provided at relatively low cost and very short notice to enable customers to better understand and manage their electricity consumption.³⁹

The use of the internet to provide this data directly to customers raises significant issues of privacy and data security. Metering data has always been regarded as confidential, but with interval data additional information such as when a customer's home is consuming power and when it is occupied becomes available. This information must be kept private and secure. Providing this information via regular email, an unsecure communications medium, may not be sufficient.

³⁹ Some parties are concerned that the implementation of this technology will raise future concerns for customers – see submission from the Victorian Employers' Chamber of Commerce and Industry. This initial review is not addressing regulation in this area at this time.

Most overseas jurisdictions are providing customers with secure access to their smart metering information.⁴⁰ Access is provided locally on a near-real time basis, and online on a day delayed basis. The requirement to use industry standard practices is included in some regulations, but industry practice may not be useful or simple for some customers.

In these jurisdictions, most data is provided to customers directly by the distributors and the cost of doing so is sometimes borne by the customers.

Ensuring the privacy and security of customer data may be achieved by a number of ways including the use of a secure website or web based service, or via encrypted email. Web based methods can support near-real time access to the data by customers at relatively low incremental cost.⁴¹

Issues for comment

The Commission considers that there is a need for regulation to require customer access to metering data that will be available on a daily basis through secure communication methods capable of protecting customer privacy.

Comments are sought on:

- whether distributors as well as retailers should be obliged to provide metering data sets to customers
- how distributors or retailers can provide interval data from smart meters securely to customers
- how would the cost of such a service be assessed?

What other information and information sharing issues should be considered by the Commission in reviewing the regulations?

3.2.3 Shopping around for a better offer

The ability to choose between competing retailers offers customers one of the best opportunities for managing their electricity charges. The marketing of retail offers is currently regulated under the Retail Marketing Code of Conduct (the Marketing Code) and Guideline No 19: Price and Product Disclosure (Guideline No 19).

⁴⁰ Background Paper 2: Review of Other Jurisdictions – Regulations and Smart Meters

⁴¹ Retailers (and distributors?) should also be required to facilitate customer access to the Home Area Network (HAN) once technical specifications and access arrangements are agreed within the industry. However, it is too early to consider regulations around the HAN given the current lack of industry arrangements.

These instruments set out the key regulations governing marketing activity, including requiring retailers to provide details of all prices, charges and tariffs to be provided to customers before entering into a contract.⁴² Guideline No 19 requires retailers to provide customers a written offer summary in a standard form so that they can use this to compare offers between retailers.

Smart meters will allow networks and retailers to develop a wide range of tariff structures, featuring many different types of prices and charges. These may be based on consumption or demand within certain set or dynamically notified periods. Without a common approach, it may become virtually impossible for customers to evaluate offers between retailers. Retailers may be encouraged to develop complex offerings to reduce customers' ability to identify potential savings from competing retailers.

Requiring the use of common definitions on retailer bills and market offers appears to be increasingly popular overseas as a response to retailers using their own definitions that undermine customers' ability to compare competing offers. Regulators have in some cases developed their own dictionary of terms and required retailers to use consistent definitions where they have been provided.

Other overseas approaches to fostering competition include using specified customer profiles and displaying the average price per day or per unit of electricity consumed.⁴³

On the other hand, too prescriptive and standardised information may risk customers choosing a sub-optimal retail offer for them.

Notwithstanding, these options that could be considered in Victoria are:⁴⁴

- Requiring the energy retail businesses to offer retail market offers with tariff structures that are the same as the network tariff structures. That is, that if the network has a three part TOU tariff that applies to various time periods, then it would be a requirement that the retailers provide at least one market offer with the exact same tariff structures.
- Requiring retailers to provide indicative charges for a standard set of customer profiles to assist customers when choosing between two complex retail offers
- Requiring retailers to display the average price paid per day or unit of energy on the bill to provide customers with a simple index for understanding how their costs are trending, with information on how to compare that cost against competing offers

Energy retailers would be required to show the same information on offer summaries or any material used to market specific offers to customers.

⁴² Marketing Code, section 6.3

⁴³ Background Paper 2: Review of Other Jurisdictions – Regulations and Smart Meters

⁴⁴ These options are also discussed in the St Vincent de Paul Society: A National Report on Customer Protections and Smart Meters, February 2010

Issues for comment

Comments are sought on these, or alternative, options for ensuring customers are able to compare competing retail offers when time-of-use tariffs and more complex tariffs are introduced.

3.3 Remote disconnection and reconnection

Smart meters allow new approaches to the disconnection and reconnection of customers.⁴⁵ They will be able to perform these functions remotely using a facility that is built into the meter. This means that a visit to the premises will not be necessary; the service could be performed much quicker and simply and at lower cost.

Currently, the services provided by the distributor in disconnecting and reconnecting premises are provided manually, on-site using the service fuse.

With smart meters, it may still be necessary sometimes for the premises to be visited to disconnect and reconnect the service fuse, but the majority of situations will involve remote disconnection and corresponding reconnection via the smart meter.

This review is concerned only with the implications for remote disconnections and reconnections under the operation of smart meters, as it is not intended that the regulation will change for manual services.

3.3.1 Prompt reconnection and disconnection service

Currently the regulations require the distributors to energise customers' connections within one business day of the request.⁴⁶ Regulation was not concerned about the method for the disconnection and reconnection as a visit to the customer's premises was usually necessary to insert or remove the fuse (on the assumption that most premises were physically disconnected).

⁴⁵ Deenergisation and energisation are also terms used to describe making the power available to premises where the premises is already connected to the distributor's mains. A consistent approach is required across a number of codes for these definitions to take into account smart meter based services. For this paper, we will continue to use reconnection and disconnection interchangeably with energisation and de-energisation.

⁴⁶ Distribution Code Clause 2.5

The smart meter specification requires that 99% of reconnections are to be able to be performed in one hour.⁴⁷ The Commission considers that it will be in customers' interests to have these services performed more promptly and in less than a business day.

Issue for comment

Should the regulation require the distributors to disconnect and reconnect premises more quickly if the smart meter functions are available?

3.3.2 Customer protection under disconnection

Where disconnection is performed without the distributor visiting the site, the Commission wants to ensure that it is always the correct customer that is being disconnected and that customers understand that the disconnection may take place remotely.

When this service is performed manually, there is the opportunity for the technician to ascertain whether the premises are the correct premises and whether someone will be continuing to occupy the premises and under what circumstances. None of these checks will be possible with remote disconnection.

There are some options which may be considered:

- Ensuring that a customer on site is not already a new occupier when carrying out a disconnection.
- Ensuring that there is not a corresponding reconnection request when programming a disconnection.
- Undertaking service visits if the customer is a life-support customer.

The Commission does intend to amend the regulations so that the retailer's disconnection warning to customers indicates that the disconnection may be performed remotely without a visit to the property. The St Vincent De Paul proposal goes further and advocates that retailers make two attempts within a 24 hour period to contact all customers prior to the remote disconnection. Currently the regulation only requires additional steps for customers in hardship.

Issues for comment

What steps could be taken by the distributors and/or the retailers to ensure that the wrong customer is not disconnected with smart meters?

Should retailers take additional steps prior to disconnecting all customers, as well as noting on the disconnection warning that the disconnection may be carried out remotely?

⁴⁷ http://new.dpi.vic.gov.au/__data/assets/pdf_file/0014/13109/Minimum-AMI-Functionality-Specification-Victoria.pdf

3.3.3 Information to new customers after remote disconnection

Currently, if retailers request vacant premises to be disconnected, distributors are required to leave a document at the premises providing the following information:

- to whom the occupant must address any request to connect the supply address;
- what the occupant's options are for entering into a contract for the sale of electricity with a retailer; and
- a list of current retailers.⁴⁸

This information is likely to be left under the door or in the meter box which increases the chance that it will be available for the next occupant. Under remote disconnection, the site will not be visited and therefore it is unclear how this information will be provided.

If the premises are left energised, and the new occupant does not contact a retailer before turning on the power, the EI Act assumes this customer has entered into a deemed contractual arrangement and their liability for electricity commences from the date the power is consumed.⁴⁹ Under these circumstances, the retailer financially responsible for those premises has a responsibility under their licence to provide relevant information to those customers, including their options in the competitive energy market.⁵⁰

The Commission understands that retailers usually require premises to be disconnected when customers vacate the premises. However, we do not know the extent to which customers take possession of premises which are disconnected and consequently do not know who to contact for energisation. This could be the retailer responsible for the premises or another retailer.

At the least, the Commission considers it important that there is some information accessible to customers who find themselves in this situation. There do not appear to be many practical options available where there is not a visit to the premises.

An option to consider is whether a sticker should be placed in the meter box that contains an appropriate call centre number for the customers to ring to contact a retailer. This information could be provided while smart meters are being installed or while the meters are still being manually read. This would ensure that the distributor meets its current obligations.

The costs to distributors of this option would be off-set by savings in not visiting the site for disconnection and leaving documentation at that time.

⁴⁸ Distribution Code clause 9.1.13

⁴⁹ Section 39 EI Act.

⁵⁰ Section 9.3 of the electricity retail licence

Issue for comment

Under remote disconnection should the Commission require that information be provided by a sticker placed in the meter box?

What other options are available for ensuring new occupants know how to go about finding a retailer and getting reconnected?

3.3.4 Safety considerations

The Commission notes that the remote reconnection of customers' premises after disconnection has safety implications which must, under the Electricity Safety Act, be considered in relation to the distributor's general duties to keep the public safe. ESV is currently developing protocols that will be regulated within the framework of the Electricity Safety Management Schemes. These must be submitted by the distributors by December 2010 and then approved by ESV.

Issue for comment

The regulatory proposals set out above do not appear to be impacted by these developments. However the Commission welcomes comments on this view.

3.4 Frequency of network billing of retailers by distributors

A key issue for distributors and retailers is whether the default Use of System Agreements (**UoSAs**) or any regulatory instruments need to be amended to address the issue of the frequency of network billing of retailers by distributors.

The Commission's interest and powers in this matter stem from the licence conditions which require distributors and retailers to adopt the default Use of System Agreement provisions decided by the Commission if the parties cannot negotiate independent commercial arrangements for the use of the distribution system.⁵¹

The issue arises because at least some distributors have built smart meter data handling and billing systems which assume and require monthly network billing.⁵²

⁵¹ Clause 4, Electricity Distribution Businesses Licence

⁵² The decision was apparently made in the context of the Victorian Government's policy (as part of its AMI roll-out policy announced in 2006 and reflected in the revised OIC under section 46D of the Act) that network billing for each AMI customer occurs monthly ("monthly network billing"). This policy was reflected in the work of the AMI ISC, particularly its "Victorian AMI Process Model".

Currently, network billing is effectively quarterly (approximately one third of customers are billed each month). At least some retailers are concerned about the prospect of monthly network billing beginning as early as July 2010 (for reasons set out below) and are not agreeable to it. Some distributors claim that the costs of now not proceeding with monthly network billing will be significant, and will prevent them meeting their near-term smart meter roll-out obligations.

It is unclear to the Commission the extent to which distributors proceeded in reliance on one or more of the following:

- a belief that they had a right under UoSAs to require monthly network billing; or
- a belief that they had binding agreement from retailers to monthly network billing for customers with smart meters; or
- a belief that the regulatory regime would come to require monthly network billing for these customers.

The Commission has been provided with differing perspectives on these matters from both the distributors and the retailers.

Contrary to the view put by the industry AMI Process model,⁵³ it appears to the Commission that UoSAs do *not* currently provide for network billing to be more frequent than quarterly, except for supply points which have been connected to a distribution system for the first time after 2001 (clauses 7.4(d) and 7.5(a)).

Distributors are suggesting that the Commission support the view that they are entitled to move to monthly network billing or, alternatively, that the Commission amend the default UoSA. Two distributors, at least, have strongly asserted that not adopting monthly network billing from July 2010 for smart meters customers will prevent the commissioning of their systems. In turn, this would require them to make system changes and maintain their project teams for considerable time, at a cost over \$20 million.

Retailers who have made representations to the Commission are particularly concerned that they will be required to meet the distributors' monthly billing requirements before any changes to the billing cycles for customers are decided.⁵⁴ They claim that there will be an adverse cash flow impact because of the mismatch between receipts from customers and outgoings to distributors. As a result retailers' working capital requirements will be increased and the costs could be expected to be passed on to customers in the form of higher retail prices.

⁵³ Chapter 15 of the AMI Process Model seems to suggest that an amendment to UoSAs was thought unnecessary:

"The transition to daily delivered interval meter data under the current Use of System Agreement will result in networks calculating Network Charges on a monthly basis for all NMI's rather than based on manual reading events as they occur."

⁵⁴ Customers' monthly billing was addressed earlier in section 3.2.2.

The Commission understands that some distributors are attempting to negotiate a commercial outcome with some retailers, but to date these negotiations have not proved successful.

Given the opposing viewpoints, it appears that either the distributors or the retailers stand to incur a financial detriment depending on whether monthly network billing begins to be phased in sooner or later. The question for the Commission is to decide how to approach the UoSA amendments. We have considered a number of approaches to this question:

- An approach which reiterates the correct interpretation of the previously agreed UoSA provisions (which is that distributors cannot bill monthly for all customers);
- An approach which places the onus on the party responsible for the current discord (seemingly the distributors); and
- An approach which produces the least-cost outcome for consumers

The Commission is aware that the parties have been in dispute on this matter for some time. Therefore we wish to facilitate an outcome to this impasse and propose a solution, which is consistent with the Government's smart meter policy objective.

Issue for comment

The Use of System Agreements are amended to provide for monthly network billing of customers with smart meters, but in the period until 1 January 2012 (or some other agreed future date) the payment terms for such network bills be extended if the retailer is billing the customer quarterly. UoSAs currently provide that retailers must pay network bills within 14 days. This would be extended to a number of days that produced an equivalent outcome to their current level and pattern of payments.

Under this amendment, distributors could implement their new billing systems, generate monthly network bills and all of the distributors' objectives in the AMI Process Model would be attained. For retailers, while data and bills would begin to flow to them more frequently, there would be no acceleration of their payments to distributors, no mismatch between receipts from customers and outgoings to distributors, and therefore no increased working capital required. Distributors' working capital positions would be unchanged from their present state, rather than being "immaterially" advantaged.

Comments are invited on whether such a solution is supported, whether it can be achieved by negotiation, or whether the Commission should amend default UoSAs to bring about this outcome.

4 | OTHER ISSUES?

This review has highlighted a number of regulations which require some amendment because of smart meter technologies. We have identified those matters which we consider are covered by existing regulations and need review now.

As well, we have identified those matters which will not be considered in this review, either because they are being addressed elsewhere or it is premature to consider a regulatory approach at this early stage.

Issue for comment

Comments are invited on any matters which are not addressed elsewhere in this paper but which interested parties consider require attention now, or in the next stage of the review.

APPENDIX A | SUMMARY REVIEW OF REGULATORY INSTRUMENTS

Appendix A sets out all the regulations which the Commission considers should be amended now or in the medium term, on which interested parties are invited to comment

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view

PART 2 - BILLS				
ISSUING BILLS				
3.1 Billing cycles	<p>A retailer must issue a bill to customers on a standing contract:</p> <p>(a) in the case of an electricity contract, at least every three months;</p> <p>(b) in the case of a gas contract, at least every two months; and</p> <p>(c) in the case of a dual fuel contract, at least as often as the retailer and the customer have agreed, with the customer's explicit informed consent .</p> <p>Billing cycles can be negotiated in market contracts, with explicit informed consent.</p>	<p>Key issue for review. Consider needs to be considered independently to the network monthly billing issue.</p>	<p>OE – considers there is a strong link between network monthly billing and customer monthly billing which may not be able to be resolved in a timely manner. Generally supports customers' monthly billing so they can access benefits</p> <p>Allan Driver – changes should be clearly communicated and enable consent (opt-in or opt-out?). Customers must be able to access date on a "30-minute basis for daily/weekly/monthly periods" Consideration given to in-home devices</p> <p>SVDP - there should be a minimum three months billing cycle for customers on dynamic pricing contracts. Furthermore, billing cycles longer than three months may increase the occurrence of payment difficulties due to the bill volatility customers on dynamic pricing contracts will be exposed to.</p> <p>EWOV -negotiated payment plans are often based on fortnightly instalments, so a monthly billing cycle could make budgeting easier for some customers and encourage retailers to identify customers experiencing payment difficulties</p>	<p>Refer discussion in section 3.2.</p>

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			<p>earlier</p> <p>Red Energy - the requirement for EIC should be removed for market and standing offers. Debt cycle obligations need review in line with the shorter bill cycle.</p> <p>Simply Energy - linked with network monthly billing and whether customers can be moved to monthly billing without explicit informed consent</p> <p>CUAC – any changes to billing cycles should consider the consent requirements, implications for collection cycles and hardship provisions</p>	
CONTENTS OF A BILL				
4.2 Information on a bill	Information which must be on the bill, including’ (c) the period covered by the bill;	This clause, including all sub-clauses, is a key issue for the review	<p>D Foskey – customers or authorised agents should be able to download info from RB/DB websites, including tariffs, consumption and overall price.</p> <p>Allan Driver – information should be provided on the internet</p> <p>CUAC – consider what and how information should be provided on the bill</p>	Refer discussion in section 3.2
	(d) the relevant tariff or tariffs		SCO - proposes that retailers provide customers on time related tariffs with consumption data for each tariff segment	
	(e) whether the bill is based on a meter reading or is wholly an estimated bill;		Simply Energy - consider how substitutions are dealt with,	Refer discussion in section 3. 2

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			<p>particularly as networks obligation to deliver daily reads does not commence until 1.1.2012.</p> <p>Red Energy - consider when bills should be described as estimates, including materiality thresholds.</p> <p>CUAC – review appropriateness of existing regulation</p> <p>SCO – says that meter data lost for DPP events should not base bills on substitutions – they should be based on non-DPP events. Customers should be informed of the scope for estimations on their bills.</p>	
	(f) whether the bill is based on any substituted data	Paragraph (f) references the metering code. These matters have been removed from the metering code since the metering code was amended to align it with the national metrology requirements.	Simply Energy - how substitutions impact customers' bills must be considered.	Refer discussion in section 3.2 Additionally It is proposed to remove the references to the metering code so that (f) reads; whether the bill is based on any substituted data prepared in accordance with the relevant substitution procedure in the <i>applicable regulatory instruments.</i>
	(g) the total amount of electricity (in kWh) consumed in each period or class of period in respect of which a relevant tariff applies to the customer and, if a customer's meter measures and records consumption data only on an accumulation basis, the dates and total amounts of the immediately previous and current meter readings,		EWOV - customers currently can take their own meter reading and compare it to the information on the bill. Customers with interval meters complain that their bills only show a total usage figure. EWOV thinks the suggestion that customers can verify their usage by	Refer discussion in section 3.2

ENERGY RETAIL CODE				
REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
	estimates or substitutes;		<p>adding up all usage on their bills and comparing this to their meter is onerous. Other options should be explored, eg the inclusion of an index read once every twelve months and that retailers could provide a summary of interval data on bills .</p> <p>Red Energy - few customers require access to interval data to reconcile their bills. This should be an optional requirement to ensure that retailers are not forced to provide the same for all because this will simply increase costs to all customers for a service that may only be requested by a few. Retailers should be allowed to charge for administration costs associated with the provision of data</p> <p>OE - Recognises that this is an important issue to consumers, and may potentially drive increases in complaints and Ombudsman queries. Need a practical means of providing for the spirit of the reconciliation requirement with the new technology and tariff structures.</p>	
	(h) if the retailer elects to include meter readings or accumulated energy usage from an interval meter on the bill, the			

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
	meter readings or accumulated energy usage based on quantities read or collected from the corresponding meter accumulation register(s);			
	(i) if the retailer directly passes through a network charge to the customer, the separate amount of the network charge;		.	
	(n) if the customer is a domestic customer, details of the availability of concessions;		SVDP - this could include 'relevant consumer information tools' as the regulator can more easily require retailers to include references on their bills to important consumer information tools funded by the government. An example is an AER website containing important consumer information about tariffs and energy offers deemed important to increase consumer awareness in a deregulated retail market.	Possibly a confusion of policy aims. The reference to concessions, etc is to assist customers in financial difficulty. SVDP reference to 'relevant consumer information tools' is presumably to address the information gaps for all consumers, and to assist them to access competition (for example, the ESC's YourChoice website). Refer discussion in section 3.2 on assistance to customers in shopping around in the competitive market
4,3 Bundled charges	The requirement for retailers to provide customers with reasonable information on network charges, retail charges and any other charges relating to the sale or supply of energy comprised in the amount payable under the customer's bill. This information only has to be provided on request.	Key Issue for review	Allan Driver – separate out relevant charges: Supply charge – monthly if necessary Meter charge Network charge Electricity usage per kWh SVDP - SMI project/rollout costs should be a line item on customers' electricity bills VECC - Review should consider how information on the bill could	Refer discussion in section 3.2

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			be improved to give customers more information on their charges CUAC – review should consider whether fixed costs should be delineated as line items	
4.4 Graphs	Information to be included on graphs, including consumption information for each billing period for last 12 months and comparison with same period of the current bill.	Key Issue for review		Refer discussion in section 3.2
BASIS OF A BILL				
5.1 Bills based on meter readings	Bills must be based on meter readings unless a customer gives explicit informed consent; and, in any event, retailers must use their best endeavours to ensure the customer’s meter is read at least once in any 12 months.	The meter reading requirements for all meters are now largely regulated by the national metrology requirements and retailers do not have direct influence over this process except to ensure customers provide access for manual reading. For smart meters physical access, while still will need to be provided, is not an issue to ensure routine meter reading and the expectation is that all bills will be based on data frequently collected from the meter.	CUAC – needs to be reviewed for relevance in the operation of smart meters .	Refer discussion in 3.2.2. The Commission also proposes the following amendment to this clause; in any event, use its best endeavours to ensure that the customer’s bill is based on a reading of the customer’s meter at least once in any 12 months and if the customer’s meter is a smart meter use its best endeavours to ensure that every customer’s bill is based on a reading of the customer’s meter .
5.2 Estimations	Methodology for estimated bills	This section is concerned with how the estimation is made not whether the bill is an estimated bill or not and may be impacted by smart meters The requirement for the estimation continues to reflect the previous position whereby the Victorian regulation set out how first tier customer’s data was collected and the	SVDP - the remote read functionality delivers one of the most significant customer service improvements associated with SMI as it removes the need for estimates and associated problems with under and over charging. It is therefore essential that the practice of issuing bills based on	Refer to discussion in 3.2. As well, a technical amendment to this clause is proposed; (a) Despite clause 5.1, if a retailer is not able to reasonably or reliably base a bill on a reading of the meter at a customer’s supply address , the retailer may provide

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
		<p>national electricity market regulation set out the arrangement for second tier customers.</p> <p>The meter reading requirements for first and second tier customers are now covered by the national instruments which set out how all data is to be validated, and where necessary, substituted and estimated. These requirements are set out in the “Metrology Procedure: Part B National Electricity Market”, that is available on the AEMO website.</p> <p>The Commission agrees that the current estimation and substitution methodologies, that are AEMO’s responsibility in a NEM context, may need to be revised for small customers with smart meters.</p>	<p>estimates be abolished in a SMI environment.</p> <p>Red Energy - consideration should be given to the current definitions of when a bill should be described as an estimate and the materiality thresholds for when it must be re-billed. Interval data ensures that the value of estimation within each bill is now known and the value of the bill which is not estimated can be identified. The current obligation on retailers is to ensure a minimum of one actual read per year. With remote reads under AMI we believe this obligation – or at least the costs associated with a site visit should communications fail – should reside with the DB.</p> <p>OE - given that the meter will be read remotely on the half-hour, the notion of a bill being ‘estimated’ because a person could not physically read the meter every three months - as is currently the case for estimated reads - will no longer be valid.</p> <p>Under some circumstances estimated data will be required. Our preliminary views are that this would be less than 10% of the time, maybe more in the vicinity of 1-2%. This issue needs to be addressed</p>	<p>the customer with an estimated bill prepared in accordance with the relevant estimation procedure in the applicable regulatory instruments.</p> <p>(b) Despite clause 5.1, if in the context of an electricity customer transferring from one retailer to another retailer applicable regulatory instruments permit an estimate of consumption rather than a meter reading, the retailer may provide the customer with an estimated bill prepared in accordance with the relevant estimation procedure in the applicable regulatory instruments.</p>

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			and better understood through the review. The current Metrology Procedures for estimation and substitution of small customer data may need to be reviewed in conjunction with the roll-out of interval meters.	
5.3 Bill Smoothing	Methodology for determining bill smoothing arrangements and for reconciling bills	Issue for review	SVDP - As SMI provides retailers with daily meter reads, retailers should be required to assess the amount of energy a customer on a bill smoothing contract consumes every three months (rather than the six month requirement proposed for customers not connected to SMI).	Views are sought on whether the reconciliation requirements for bill smoothing should be changed to 3 months for those customers with smart meters.
ADJUSTMENT OF THE BILL				
6.1 Review of the bill	Obligations on retailers and customers when the customer requests a review of the bill.	Should obligations be the same irrespective of smart meters?	SVDP - SMI enabled dynamic pricing contracts will make customers' bills more complex and thus more difficult to understand. It is therefore crucial that processes are in place to allow customers to query and review bills in a transparent, affordable, accurate and efficient manner.	Refer discussion in section 3.2
6.2 Undercharging	Obligations on retailers, and monies to be recovered from the customer, if the retailer has undercharged or not charged a customer	Outcomes the same irrespective of smart meters, but drafting may be required to take account of smart meters	SDVP – under smart meters a retailer cannot recover undercharged amounts for longer than 3 months prior to notifying the customer. SMI will provide retailers with daily reads of every customer's consumption and retailers should	The current regulation, which in Victoria which only allows 9 months recovery, is already a substantive intervention in the market. Commission does not consider it necessary to review this regulation at this time.

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			therefore be significantly better equipped to avoid undercharging scenarios.	
PAYMENT OF THE BILL				
7.1-7.5 Payment of bills	Time for customers to pay, unless negotiated differently in a market contract/ Ways in which customers can pay their bills/Payment in advance/Fees and Charges for Credit Card and Dishonoured Cheque payments	Obligations the same irrespective of smart meters	OE & SE – link with 3.1 (billing cycles) SVDP – customers should have a minimum of 12 business days to pay a bill upon receiving it, particularly low income and pensioners.	Regulation only needs to be reviewed if the billing cycle is changed to monthly. Refer to discussion in section 3.2
7.6 Vacating a supply address	Obligations on customers for vacated premises	Review in light of remote disconnection & reconnection functionality	SVDP - a SRC terminates on the earliest 1 business day commencing upon receipt by the retailer of a termination notice (even if the customer has vacated the premises earlier) The obligation of SRC customers vacating their premises to continue to pay for energy consumed at the premises (as well as the fixed charge) for a minimum of 5 business days after giving the retailer notice is unjustified in an SMI environment where retailers can order a special read.	This clause is considered quite fair in relation to customer payment. Stakeholder views are sought as to whether changes are required because of the review of smart meters.
PAYMENT DIFFICULTIES				
11.1 – 11.4 Assistance to customers with payment difficulties	Obligations on customers and retailers if customers experiencing payment difficulties. Obligations on retailers to assess capacity to pay and provide information and assistance. Requirements for debt collection	Obligations the same irrespective of smart meters The Wrongful Disconnection Payment (WDP) Review highlighted some ambiguity in drafting clause this clause. This will be reviewed separately.	OE – understands why this issue is of concern to customers, but cannot see what more retailers can do to assist customers.	No change to the regulation because of smart meters Commission is undertaking a review of retailers' financial hardship policy implementation and the matter will be reviewed in that context, as well

ENERGY RETAIL CODE				
REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
				as the WDP Review Refer to discussion in section 3.1.
INSTALMENT PLANS				
12.1 – 12.3 Options for customers and review	Setting out when customers may be eligible for instalment plans and requirements for retailers to review and adjust	Obligations the same irrespective of smart meters The Wrongful Disconnection Payment Review highlighted some ambiguity in drafting clause this clause. This will be reviewed separately.		No change to the regulation because of smart meters Commission is undertaking a review of retailers' financial hardship policy implementation and the matter will be reviewed in that context, as well as the WDP Review Refer to discussion in section 3.1.
PART 4 - DISCONNECTION				
GROUNDS FOR DISCONNECTION				
13.1 Non-payment of bill	Procedures prior to retailers disconnecting customers	Key issue for review	SE – ESV is undertaking a review of safety issues arising from remote disconnection/reconnection. Review should not duplicate. OE – link with ESV safety review. Note that remote disconnection/reconnections should add benefits for customers Allan Driver – additional information should be provided to customers SVDP –that a retailer must make two notification attempts during the 24 hour period prior to requesting the distributor to remotely disconnect the customer's premises. Remote disconnections make the process more expedient and impersonal, and thus create a	No change to the regulations generally, but refer to discussion in section 3.3 regarding further information to customers who are to be disconnected remotely

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			health and safety risk to customers. EWOV - the existing notification requirements should be retained and customers are made aware of the possibility of remote disconnection in all disconnection warning notices.	
13.2 Customers without sufficient income	Additional obligations on retailers prior to disconnecting customers who are known to have financial difficulties	Key issue for review		Refer to discussion in section 3.3 on whether there should be additional steps for customers prior to remote disconnection
13.3 Denying access to meter	Obligations which apply when customer's meter is not accessible for reading	Clause 13.3 could be clarified that this applies to manually read meters and to ensure that it is clear that access does not imply the customer providing or not electronic access to the meter.		Minor drafting amendment proposed: Propose the following amendment; A retailer may disconnect a customer other than a customer with a smart meter if, due to acts or omissions on the part of the customer , the customer's meter is not accessible for the purpose of a reading for three consecutive bills in the customer's billing cycle but only if:
NO DISCONNECTION				
14 No disconnection	Circumstances and time frames when retailers cannot disconnect	Consider in context of remote disconnections		No change proposed, however we note that the times associated with disconnection and reconnection could be subject to new prompt disconnection and reconnection services being available that utilise the smart meter. Refer to discussion in section 3.3.

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view

RECONNECTION				
15.1 – 15.2 Customer's right to reconnection	Circumstances and timing for customer's reconnection	Issue for review		As for 14 above
PART 6 - MARKET CONTRACTS AND VARIATION				
20 Variations requiring customer's agreement	How variations to tariff and other terms and conditions can be effected	Key issue for review	<p>Simply Energy - when network tariffs are changed, retailers must be able to move customers to a corresponding retail tariff without impediment</p> <p>VCOSS – maintain current requirements for notification and informed consent to any tariff variations</p>	Refer to discussion in section 3.2
21 Gazette based variations	How variations to standing offers take effect	Key issue for review	<p>SDVP - It is necessary to identify a new approach to standardising the standing offer tariff shape. Tariff shape is separate from price setting and contract terms and conditions. A standardised shape is essential to ensure that the standing offer is the basic, standard, comparable offer as intended.</p>	<p>Linked with above – refer to discussion in section 3.2</p> <p>SDVP raises an issue of what standing offer tariffs retailers are required to offer. This is a statutory issue and is not addressed in this review.</p>
PART 7 – TERM AND TERMINATION				
22.1 – 24.6 Term, termination and expiry of contracts	Sets out when contracts take effect, how they can be terminated, procedures applying if a customer breaches the contract and termination in a retailer of last resort event	Issue for review	<p>SDVP - a market contract should have no effect to the extent that it requires a customer to give more than 12 business days notice to terminate the contract.</p> <p>Remotely read meters will make the transfer process more efficient and the termination notice requirement should therefore</p>	<p>Customer's termination notification</p> <p>Customers are currently required to give 28 days notice if they wish to terminate a contract. Under smart meters, customers' meters can be read more quickly, enabling a quicker transfer if necessary, but there are other processes which impact on the timing of transfers.</p>

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			<p>reflect:</p> <ul style="list-style-type: none"> - The notice requirement on retailers to inform customers about a tariff/price change. - The cooling-off period. <p>The 10 day cooling off period should not commence until the customer has received the contract and that customers should be given a prescribed form explaining their cooling off rights before the cooling off period starts.</p>	<p>Comments are sought on whether the notification time should be reduced and why.</p> <p>Cooling-off period It is agreed that attention should be given to marketing conduct in a TOU environment, at least for the first 2-3 years (refer to some discussion in section 3.2). However, the proposal by SDVP is externally-driven and impossible to enforce (eg postage late, customer says didn't receive, etc). The obligation must be on the retailer to demonstrate that the material was given to a customer within 2 business days, and the cooling-off commences from that date (see clause 3.5 of Marketing Code).</p> <p>No change to the regulation is proposed.</p>
PART 8 - GENERAL				
PROVISION OF INFORMATION				
26.2 Charter	Circumstances in which retailer must provide a customer charter and information to be provided	Issue for review	FCRC – retailers should have to provide info on smart meters, their billing requirements and how customers will be impacted	Charter requirements will be reviewed
26.4 Advice on available tariffs	Information which must be provided to customer on available tariffs and notification of tariff variations	Key issue for review	SDVP - retailers should be required to notify their customers about any tariff/price change before it takes effect. Moreover, the notification period for tariff variation should reflect the notification period	Refer to discussion in section 3.2

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
			<p>customers are required to provide retailers in order to terminate a contract. Arrangements must be in place to ensure that the customer is notified of any tariff change (resulting from network re-assignment or retail tariff change) in advance.</p> <p>CUAC – should be reviewed to as only requires customers to be notified of tariff changes no later than next bill</p>	
	Maintenance of life support register and information from retailer to distributor	Key issue for review, particularly in light of remote disconnection/connection functionality	SVDP - That the relevant definitions are amended to broaden the definition of households with life support equipment to households with special needs (due to health and medical conditions).	The Commission considered this matter at length in the Review of Distribution Communications in Widespread Supply Events and made changes to the regulations to provide greater protections to persons with special needs. No further changes to the regulation proposed
HISTORICAL BILLING INFORMATION				
27.2 Historical billing data	Information to be provided to the customer and charges which may be imposed	Key issue for review	<p>EWOV - supports SCO proposal that customers should have a choice between a full set of billing data and a summary of the data (including relevant metering data) on which the bill was based in a form that is easy to understand.</p> <p>VECCI - customers should be able to request, and access, smart meter information related to consumption on their own premises.</p>	Refer to discussion in section 3.2

ENERGY RETAIL CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view

			<p>CUAC – customers need to understand how data is provided. Concerns about access, privacy and security</p> <p>VCOSS – review for privacy concerns</p> <p>SCO – retailers must be able to provide to customers the full set of metering data and a summary of metering data – customers can choose options</p>	
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ELECTRICITY DISTRIBUTION CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
2.5 Previous connection	That the distributors must use best endeavours to energise a customer's supply within one business day	Energisation by smart meter may be new service that can be carried out is less than one day.	The NECF and National Energy retail Law is considering how the terms connection and energisation etc will be applied taking into account smart meters.	Refer discussion in section 3.3
9 Provision of information Clause 9.1.13	When disconnecting supply the distributor must leave information at the site about reconnection including a list of retailers	Under remote deenergisation the site will not be visited hence it is unclear how this information currently provided under clause 9.1.13 would be provided under remote reenergisation.		Refer to discussion in section 3.3.
Clause 9.1.14 9 Provision of information	This clause sets out the advice that the distributor must given the customers when a smart meter is to be installed.	This clause was especially inserted so that customers would know when a smart meter was to be installed under the rollout		Clause 9.1.14 has been operational for a few months and this review is an opportunity in the light of experience to review this clause. The Commission seeks views on the operation of clause 9.1.14.
12 Disconnection of Supply	Sets out the conditions under which the distributor may and may not disconnect the customer, including at a retailer's request and at the customer's request	While the issues of disconnection and/or deenergisation by fuse pull or the meter is an issue for smart meters it is likely most of the conditions associated with disconnection will not be impacted.		Refer to discussion in 3.3
13 Reconnection	Sets out the conditions under which the distributor must reconnect a customer	Related to 12 above some clarification or changes may be required		Refer to discussion in 3.3
14, 15, 16, 17, 18 and 19	Compliance with metering code, additional charges Liability, indemnity, force majeure and definitions	No smart meter issues however subject to the resolution of other matters a definition of smart meter based connection and/or disconnection may be required in clause 19.		Subject to the resolution of other matters a definition of smart meter based connection and/or disconnection may be required.

CODE OF CONDUCT FOR MARKETING RETAIL ENERGY IN VICTORIA				
REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
Training	<p>Sets out requirements on retailers to provide initial and ongoing training and testing of marketing representatives, including:</p> <ul style="list-style-type: none"> • Consumer laws • misleading, deceptive or unconscionable conduct • basic contractual rights and the meaning of explicit informed consent to a contract • the ability to clearly explain the arrangements for competition in energy supply, including the right to freely choose a retailer • product knowledge, including tariffs, billing procedures and payment options (and any other areas stipulated by the Commission) 	<p>Customers will want to know about the role of smart meters and how time-of-use tariffs will impact their bills, how they will be able to benefit from time of use pricing, why they have to pay for meters, etc. Retailers will have to adapt their marketing practices.</p>		<p>Comments are sought on whether, and how, they can be consistent training by retailers. How prescriptive should the Commission be in stipulating training areas.</p>
3.3 Pre-contractual information	<p>A retailer must provide the information to a consumer before entering into a contract, including:</p> <ul style="list-style-type: none"> ▪ details of all applicable prices, charges⁵⁵, tariffs and service levels that will apply to the consumer, where the retailer must declare that the price offered is inclusive of all costs, including GST; and • the type, frequency of bills and payment methods the consumer 	<p>The tariffs which the retailer must disclose will be dependent on the tariff structure ultimately determined by the Government. There will be implications, but it is difficult to be definitive at this time</p>	<p>SDVP - Because DPC and DLCC are new and complex retail products to customers, retailers offering these products should be required to provide the prospective customer with additional information in order to ensure that explicit informed consent is obtained.</p> <p>One particular issue that needs to be disclosed at marketing stage is offers with variance between</p>	<p>Refer discussion in section 3.2</p>

⁵⁵ Subject to the retailer being aware of all charges which may apply to that consumer or the consumer's premises.

CODE OF CONDUCT FOR MARKETING RETAIL ENERGY IN VICTORIA				
REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
	<p>will receive;</p> <ul style="list-style-type: none"> ▪ cancellation rights and any termination fees that might apply; ▪ all relevant information about any difference between the contract's terms and conditions and the basic terms and conditions under the Energy Retail Code 		<p>network and retail tariff shape. A standardised shape is essential to ensure that the standing offer is the basic, standard, comparable offer as intended.</p> <p>VCOSS – retailers' standing offers should reflect network tariff shape; there should be tools to assist customers to compare offers and tariff shapes</p>	
3.4 Cooling off	<p>Sets out the consumer's cooling-off rights:</p> <ul style="list-style-type: none"> ▪ 5 business days from and including the relevant date if the customer requires energisation; and ▪ otherwise, 10 business days from and including the relevant date 	No implications assumed because of smart meters	<p>SDVP - the 10 day cooling off period should not commence until the customer has received the contract and that customers should be given a prescribed form explaining their cooling off rights before the cooling off period starts.</p>	<p>It is agreed that attention should be given to marketing conduct in a TOU environment, at least for the first 2-3 years (refer some discussion in section 3.2). However, the proposal by SDVP is externally-driven and impossible to enforce (eg postage late, customer says didn't receive, etc). The obligation must be on the retailer to demonstrate that the material was given to a customer within 2 business days, and the cooling-off commences from that date (see clause 3.5 of Marketing Code).</p> <p>No change to the regulation is proposed.</p>

ELECTRICITY CUSTOMER TRANSFER CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
<p>4.2 and 4.3 Process for customer transfer - Proposed transfer date and meter read method</p>	<p>These sections are concerned with establishing the transfer date and the need for an appropriate meter reading at that time for the purpose of transfer.</p>	<p>A meter read is required for transfer, this traditionally has been from a scheduled read (up to a quarter apart) or a special read which would incur additional costs.</p> <p>Smart meters allow reading daily and daily remote readings may become a "scheduled read" and a transfer the next day could be achieved without a special read being required.</p> <p>The principle that a transfer must take place based on actual meter data should be retained.</p> <p>Smart meters will provide more transfer flexibly as reading will occur more often with daily reads being proposed. With the approach proposed section 4.3 will not require amendment.</p> <p>Clause 4.2(b)(2) allows a retrospective date to be applied (AEMO's MSATS provides for this date to be up to 10 days earlier than the date a transfer is "requested") provided that date was a reading date.</p> <p>The Commission considers that with smart meters it is not necessary to have retrospectivity to align to a reading date (see discussion above) and that retrospectivity provisions were not intended to allow arbitrary retrospective transfer dates.</p> <p>For customers with smart meters retrospectivity could continue to be</p>		<p>The existing arrangements for the manual reading of accumulation meters will need to stay in place for some time. The Commission proposes to add the following clause 4.1A to section 4 to allow for the readings from smart meters;</p> <p>4.1A Smart meters For the purposes of clauses 4.2 and 4.3, if a customer has a smart meter that is remotely read, a reading of the customer's meter and the processing of the consumption data in accordance with the Electricity Customer Metering Code or Metrology Procedure, as the case may be, is considered to be an actual read and a scheduled meter read.</p> <p>The Commission proposes the following amendment to clause 4.2(b)(2) which would read; "was an actual meter reading date for a relevant customer with other than a smart meter occurring after the retrospectivity start date (CATS code 1010 or 1081); or"</p>

ELECTRICITY CUSTOMER TRANSFER CODE

REGULATION UNDER REVIEW

Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
		used in the case of a move-in (sub paragraph (1)). This allows a single contract to be established from the move-in date.		

ELECTRICITY CUSTOMER METERING CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
2.4 Impulse Output	Allows the customer to request an “impulse output” from the meter and that the customer must pay for the provision of such facilities.	<p>Prior to smart metering such an impulse output would have been the only way customers, particularly large customers, could obtain detailed metering data to assist in monitoring its consumption. Under smart metering more methods of obtaining detailed data from the meter are possible, these include information passed directly to a display device in the premises or a web based provision of data that is available to the customer each day after the meter is remotely read.</p> <p>The Commission’s understanding is that the Victorian smart metering specification does not include the mandatory provision of pulse outputs.</p>		<p>The Commission proposes that clause 2.4(a) be varied to read;</p> <p>“(a) A customer, other than a customer with smart metering, may request a distributor, a retailer or a responsible person (as the case may be) to provide it with impulse outputs representing the quantities of electricity measured.”</p> <p>Smart meter would be defined as; “A metering installation installed at a customer’s premises where the annual electricity consumption is 160 MWh or less that meets the requirements of Division 6A (“advanced metering infrastructure”) and relevant Orders under Division 6A of the Electricity Industry Act (2000).”</p>
2.6 Information for Customers	Requires information to be left with the customer showing how the meter can be read by the customer from the accessible display. Currently this clause only applies to type 5 meters (interval meters that are manually read)	Smart meters can display more information than accumulation meters and it is important that customers are able to read the meter display.	The MCE SCO smart meter customer protection paper sets out a draft policy position that “all customers with smart meters should be able to check that their meter is working correctly, and reconcile their bills against their meter with a reasonable degree of certainty”	<p>The requirement that information about accessing the meter display be provided should be now extended to include smart meters. Due to the major change-over program the Commission considers that this requirement should be extended to include the provision of this information at a customer’s request. Proposed drafting: “A distributor, retailer or responsible person must provide sufficient written</p>

ELECTRICITY CUSTOMER METERING CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
				information to the <i>customer</i> so that the <i>customer</i> can access, at a minimum, the cumulative total <i>energy</i> measured by an <i>interval meter</i> or <i>smart meter</i> at the <i>customer's</i> premises when; <ul style="list-style-type: none"> the <i>meter</i> is installed at a <i>customer's</i> premises, and requested by the <i>customer</i>."
3 Changing tariffs	Requires the distributor or retailer who requires a different meter or the meter to be operated differently, or request a new tariff to seek the agreement of the distributor or retailer	It is unlikely that such a new tariff would require a smart meter to be changed or operated differently.		In principle the requirement for such agreement should be retained. No change is proposed.
6 Installation	The clause is concerned with the cost of installing different meters	Prior to smart metering, the clause has assumed that customers may request only higher cost metering. Under smart metering the clause could be interpreted as allowing customers to request a reversion to basic metering. The clause must continue to operate for >160 MWh customers with type 4 metering who may wish to request higher standard metering. The clause must recognise that smart meters are to become the minimum standard for small customers and that this standard is established currently by Victorian law rather than the NER or metrology procedures. Currently the NER and metrology procedures do not specifically include smart meters.		The Commission proposes that a new paragraph (aa) be inserted at the beginning of the clause; "This clause 6.1 is subject to the minimum standard of <i>metering equipment</i> being <i>smart metering</i> following the initial installation of <i>smart metering</i> at a <i>customer's</i> premises." Additionally, this clause should apply to all customers, not just first tier customers as it currently sets out.
7.1 Access to data	Sets out rights of the customer to access data electronically directly from	This clause was previously designed to allow large customers with electronic		It is proposed that paragraph (a) be varied as follows;

ELECTRICITY CUSTOMER METERING CODE REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
	the meter at the customer's cost	metering direct access to the meter data and did not contemplate smart meters. As noted above smart meters provide more methods of obtaining detailed data from the meter, including information passed directly to a display device in the premises or a web based provision of data that is available to the customer each day after the meter is remotely read. The Commission's understanding is that it is intended customers use these methods rather than direct electronic access to obtain data.		"A distributor , a retailer or a responsible person (as the case may be) must, on written request from a customer , other than a customer with a smart meter , provide facilities to enable the customer to electronically access data stored in metering equipment provided by the distributor , the retailer or the responsible person ."
8 Collection of metering data	Sets out that the customer may arrange how the data will be collected.	This clause did not anticipate smart meters. Where smart metering data is collected by remote means there does need to be choice of an alternative method which was intended to be remote collection. Furthermore it needs to be clear that a customer cannot request that data from a smart meter be alternatively manually collected.		This clause would need to continue to apply to > 160 MWh customers where it is not mandatory that smart meters be installed and where some customers may not have data collected remotely. The Commission proposes a new paragraph 8 (aa) be inserted; "This clause 8 does not apply to customers with smart meters ."
9 Definitions		There is currently no definition of a smart meter		A definition of a smart meters should be included

USE OF SYSTEM AGREEMENTS REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
6.3 Disconnection at the request of the retailer	Sets out the arrangements for the retailer to notify the distributor of a disconnection, the timing of the disconnection and the distributor's associated conditions. The clause, which is subject to the electricity law, allows the distributor up to 2 business days to effect the disconnection.	Disconnection refers to deenergisation. Smart meters allow deenergisation in shorter time frames and by remote rather than on-site means. Under this clause distributor must disconnect the customer within two business days. The UoSA requirements would necessarily follow any regulatory amendments in providing for retailer requests to distributors and the service that is offered by the distributor taking into account smart meters enabled services.	These services requested by industry based B2B arrangements are established under the national regulation which are being reviewed for smart meters.	Refer to discussion in section 3.3. Amendments may be required
6.4 Disconnection at the request of a customer	This clause provides for the distributor to disconnect the customer in accordance with the distribution code based on a request by the customer.	For smart meters the issue is what method does the distributor use for the disconnection and is the customer given choice.		Customers should continue to be able to request a disconnection directly with a distributor, the effective operational arrangements for this would be set out in the distribution code. It may not be necessary to amend this clause.
6.5 Reconnection of supply	Sets out that the distributor must reconnect supply when required to do so under the electricity law or when a proper request is received from a retailer.	The clause does not indicate times that must apply instead indicating that the reconnection (reenergisation) shall be carried out in accordance with the electricity law. It is the electricity law that will set out any new arrangements for customers with smart meters.		No change is proposed; other codes will set out any changed requirements for reenergisation for customers with smart meters.
7.4 & 7.5 Invoices and Metering Data	Obligations to parties to meet their financial obligations	Key issue as the distributors are seeking monthly network billing for all customers, whereas it is quarterly currently for most customers	Distributors and retailers have made separate submissions to the Commission	Refer discussion at section 3.4
8.1 & 8.3	Obligations on parties to comply with	There should not be implications		Comments are sought on whether

USE OF SYSTEM AGREEMENTS				
REGULATION UNDER REVIEW				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
Compliance with Privacy Laws	applicable Privacy Laws in relation to privacy, disclosure, use or confidentiality of information	because of smart meters, but there are concerns by consumer groups that information will be misused		there is any requirement for further amendment
8.2 Provision of Information	Obligations on each party to ensure it provides relevant information at no cost and in a timely manner information that it needs to comply with its obligations	The operations of smart meters should not impact this obligation, but views of relevant parties are required		Comments are sought on whether there is any requirement for further amendment For
8.4 Information Exchange Protocols	Obligations to participate in B2B processes	The operations of smart meters should not impact this obligation, but views of relevant parties are required	VECCI The review should include an exploration of whether the present customer protection framework needs to be altered to reflect smart meter technology changes and data exchange practices between distribution and retail businesses.	Comments are sought on whether there is any requirement for further amendment For
8.5 & 8.6 Accuracy and changes in information	Obligations to ensure information is accurate and up-to-date	The operations of smart meters should not impact this obligation, but views of relevant parties are required		Comments are sought on whether there is any requirement for further amendment
9.4 Customer Details	Customer information to be provided by the retailer to the distributor	Obligations appear to be the same irrespective of smart meters, but views of the parties are required		Comments are sought on whether there is any requirement for further amendment
9.8 Changes in Network Tariffs or Distribution Services	Obligations and procedures in relation to changes to network tariffs	Will be critical in the operation of smart meters		Comments are sought on requirements for further amendments to these provisions

DISTRIBUTION AND RETAIL LICENCES				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view

DISTRIBUTION LICENCE				
19 Statement of charges	Information to be provided to the retailer to enable the retailer to accurately charge the customer	Consultation needs to occur with the retailers as to whether further regulation is required or if it is dealt with sufficiently through the Use of System Agreement		Stakeholder views are sought as to whether any further amendments are required to the Use of System Agreements to effect this obligation on the distributors
RETAIL LICENCE				
7 Contracts with Customers	Sets out high level requirements on retailers regarding contracts with customers	There will be implications if there are statutory amendments to the standing offer contract conditions, specifically to the requirements on customers regarding TOU tariffs.	SVDP – there appears to be an assumption that time varying prices, such as time of use tariffs, will only be applied to market contracts. However, as retail tariffs tend to reflect the shape of network tariffs, time of use pricing will most likely apply to standing contracts as well. Clarification is required as to what tariff shapes are expected to be available on a standard contract.	Any regulatory changes will be dependent on policy and statutory developments. No changes proposed at this time
8 Obligation to offer to sell	Sets out statutory obligations on obligation to sell	As above		As above
9 - Information to customers				
9.1. Bill Information	Sets out minimum information which must be included in all customers' bills	The licence provision duplicates information which is included in the ERC and therefore could be deleted. However, the ERC is restricted to all domestic customers, and small business customers consuming <40MWh/pa. Given the implications for TOU tariffs, it may be necessary to retain the obligation		Refer to discussion in section 3.2 Comments are sought on whether the obligation should be retained in the licence as it refers to larger customers.
9.2 Variations	Sets out obligations to provide information on variations to tariffs	As above		As above
9.3 Deemed contracts	Sets out requirements on retailers to provide deemed contractual information	Information should be expanded to provide information on smart meter		Refer to discussion in section 3.3

DISTRIBUTION AND RETAIL LICENCES				
Clause	Summary of Obligation	Issue for operation of smart meters	Other information/submissions	ESC preliminary view
	to customers for whom they become the financially responsible retailer, if the customer moves-in and energises the premises	operations, including remote energisation and de-energisation		
9.4 Publication of tariffs	Obligations on retailers to include, in its public advertisement on tariff changes, additional information for customers from non-English speaking backgrounds	Critical concern for the Government in the publication of tariffs		The licence obligations mirror the legislative requirements. This provision will be reviewed once the Government's decisions on time-of-use tariffs are determined
9.6 Information by retailers	Obligation on retailers to provide information to premises which is leaves energised once it is vacated	Critical issue in the context of remote deenergisation/reenergisation – how will information be provided to customers about their options?		Refer to discussion in section 3.3