National Smart Meter Consumer Protections and Pricing

Draft Policy Paper Two

December 2011
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Acronyms

ACCC  Australian Competition and Consumer Commission
ACL   Australian Consumer Law
ACMA  Australian Communications and Media Authority
AEMC  Australian Energy Market Commission
AEMO  Australian Energy Market Operator
AER   Australian Energy Regulator
ARPANS A Australian Radiation Protection and Nuclear Safety Agency
AMI   Advanced Metering Infrastructure
COAG  Council of Australian Governments
CPP   Critical Peak Price
CPR   Critical Peak Rebate
CSO   Community Service Obligations
DLC   Direct Load Control
EMRWG Energy Market Reform Working Group
ESCV  Essential Services Commission of Victoria
HAN   Home Area Network
IHD   In-Home Display
MCE   Ministerial Council on Energy
NECF  National Energy Customer Framework
NEL   National Electricity Law
NEM   National Electricity Market
NER   National Electricity Rules
NERL  National Energy Retail Law
NERR  National Energy Retail Rules
NSSC  National Stakeholder Steering Committee
SCER  Standing Council on Energy and Resources
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>SCC</td>
<td>Supply Capacity Control</td>
</tr>
<tr>
<td>SCO</td>
<td>Standing Committee of Officials</td>
</tr>
<tr>
<td>TOU</td>
<td>Time of Use</td>
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Executive summary

Draft Policy Paper Two continues the consultation process on the development of a national consumer protections framework in light of the potential installation of smart meters in relevant jurisdictions. This consultation process is undertaken under the auspices of the Standing Council on Energy and Resources (SCER), previously the Ministerial Council on Energy, by the Energy Market Reform Working Group (ERMWG) of the Standing Committee of Officials (SCO). It has not been considered by Ministers and does not represent the final policy positions of SCER or jurisdictions.

In April 2007, the Council of Australian Governments (COAG) agreed to a national mandated rollout of electricity smart meters in locations where benefits outweigh costs. A further review of the smart meter program, including any revised analysis of the costs and benefits for each jurisdiction or distribution business, is to occur prior to progressing with any mandated roll-out decision by jurisdictions.

To facilitate consistency across the jurisdictions, the relevant consumer protection and safety arrangements are being reviewed to ensure they remain appropriate where smart meters are rolled out. This draft policy paper is the second consultation paper issued in this review. It addresses matters not resolved in the previous paper and considers new smart meter developments which have arisen over time.

Importantly, this review of consumer protection arrangements is undertaken against the background of the newly agreed National Energy Customer Framework (NECF). The review only considers the consumer protection implications of smart meters and does not revisit the matters already settled in the NECF. In identifying necessary consumer protections, it considers whether these are adequately addressed under the NECF or whether additional arrangements should be proposed. There are also consumer protections delivered through other mechanisms such as jurisdictional safety regulation and concessions regimes. These also are considered in determining whether or not the arrangements provide an adequate framework to address consumer issues arising from the installation and operation of smart meters.

The review also notes that third parties may access the electricity market in new ways enabled by smart meters. In particular, they may wish to provide consumers with new demand management products and assist them to make decisions based on the increased availability of consumption data. This paper addresses policy issues arising from these arrangements.

There are a considerable number of draft policy positions and consultation questions in this Draft Policy Paper Two for stakeholder and community consideration. The consultation period will run until 2 March 2012, and include at least one stakeholder forum. The objective is to canvass all issues impacting consumer protection and pricing arrangements in a national approach to smart meters, and to provide stakeholders and the community with every opportunity to consider the range and depth of issues. In particular, the aim is to ensure that low income and vulnerable consumers continue to be adequately protected in the national electricity market.
Following consideration of submissions, EMRWG will develop final policy positions. The final policy positions arising from both this consultation paper and from Draft Policy Paper One will form part of a package of national smart meter consumer protection measures. These measures will be progressed through amendments to national instruments or amendments to jurisdictional instruments following consideration by jurisdictional governments as appropriate.

This paper is divided into three parts.

**Part A – Pricing, Demand Management and Customer Billing** - focuses on the consumer implications of the potential new pricing arrangements and the impacts on different groups. In particular the review considers how consumer choice of tariffs can be facilitated and how consumers can navigate their way through the potential new arrangements. This part also considers the issues associated with demand management products, such as direct load control, which might enhance the benefits of smart meters, and the new information which might be required on customers’ bills.

**Part B – Consumer Access and Engagement** – recognises that there are benefits available to consumers from smart meters which will only be realised if consumers and the community are sufficiently informed and engaged. This includes some key privacy, consent, and dispute resolution issues for consumers, and information around the provision of information via an in home display.

**Part C - Technical and Safety** – acknowledges that because of the large number of consumers who would be impacted within a concentrated period of time, the widespread installation of smart meters will bring greater focus onto technical, public health and safety issues associated with electricity meters. The review addresses the existing mechanisms for ensuring that many of the safety and public health concerns are managed, and proposes draft policy positions on dealing with some unresolved issues. A key means of mitigating these concerns is to ensure that adequate information is provided to consumers.
1 Introduction

1.1 Background to the review

In April 2007 the Council of Australian Governments (COAG) agreed to a staged approach to a national mandated rollout of electricity smart meters in locations where benefits outweigh costs. COAG referred work on smart meters to the then Ministerial Council on Energy (MCE).

MCE committed to work with stakeholders and the appropriate jurisdictional authorities to review consumer protection and safety arrangements to ensure they remain appropriate where smart meters are rolled out. The MCE Standing Committee of Officials (SCO) was tasked with undertaking this review. This work is being conducted by the Energy Market Reform Working Group of the Standing Council on Energy and Resources (SCER)’s SCO.

1.2 Overall framework for review

The primary objective of this review is to provide advice to SCER on whether current consumer protection and safety arrangements are adequate to cover the new services enabled by smart meters and whether, and how, the arrangements can be enhanced so that consumers are able to realise the benefits. In this context, smart metering services are interpreted broadly to cover: the new pricing arrangements that may be offered to consumers, the products which may enable them to control their appliances and hence their electricity consumption, and the products and services which may enable them to easily access their consumption data.

In considering the impact of consumer protection measures on the realisation of benefits under the smart meter program, the review has considered MCE’s objectives of a smart meter rollout (Attachment A). In addition, EMRWG aims to achieve the following objectives of a smart meter rollout:

- to ensure that consumers are provided with the appropriate information to enable them to make informed choices and better manage their energy use;
- to recognise, monitor and assess any potential distributional impacts that may arise and effectively manage these over time; and
- to foster the National Electricity Objective of promoting the long term interests of electricity consumers with regard to the price, quality, security and reliability of electricity.

1.3 Approach to the review

The NECF, which is scheduled to commence on 1 July 2012, is intended to be adopted by all jurisdictions in the National Electricity Market (NEM) and will harmonise most jurisdictional consumer protection arrangements. The NECF has been taken as the starting point for most of the consumer protections subject to this review.

There are consumer protections delivered through other mechanisms such as jurisdictional safety regulation and concessions regimes. The Australian Consumer Law (ACL) also provides
strong contractual and marketing conduct protections. These will also be considered in determining whether or not the arrangements are adequate to protect consumers with smart meters.

At the same time, EMRWG recognises that measures which regulate the behaviour of the retailers and distributors may inadvertently reduce the potential for benefits to flow to consumers. New and beneficial services should not be unduly constrained by inappropriate or unnecessary regulation, for which the costs of compliance will ultimately be borne by customers. If this is the case, the review will consider improvements to the regulatory framework.

Importantly, as consumer protections are related to the products and services enabled by a smart meter, they are independent of any rollout model and will apply regardless of whether the smart meter is installed as part of a mandated or an industry led rollout. There should be a robust and consistent consumer protection framework for smart metering services, regardless of how the service is implemented. In addition, some of the products and services discussed in this paper could be provided by other technology such as interval meters. The consumer framework is intended to apply to the service provided and as such should not dependent on the technology used.

The potential services enabled by smart meters and the implications for consumer protections will be assessed against the following criteria:

<table>
<thead>
<tr>
<th>Box 1</th>
<th>Criteria for assessing smart meter consumer protections</th>
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<tbody>
<tr>
<td></td>
<td>Could the service increase the risk of any detrimental impacts for some individual or groups of customers?</td>
</tr>
<tr>
<td></td>
<td>• How likely and significant is this impact?</td>
</tr>
<tr>
<td></td>
<td>• What options could be used to address those impacts?</td>
</tr>
<tr>
<td></td>
<td>• What effect could these options have on the realisation of benefits?</td>
</tr>
<tr>
<td></td>
<td>• Are the options proportionate to the risk and materiality of impacts?</td>
</tr>
<tr>
<td></td>
<td>Will any existing consumer protection measures decrease the potential for realisation of benefits from a service?</td>
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<td></td>
<td>• Could the consumer protection measure be designed differently?</td>
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</tbody>
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In developing advice to the SCER the review also will take into account:

- the consumer protections developed in Victoria as a result of their roll out;
- experience gained from pilots and trials, both in Australia and overseas; and
- mechanisms to promote consumers’ management of their energy usage, particularly at peak times.

EMRWG continues to give consideration to the work of the Essential Services Commission of Victoria (ESCV). While existing Victorian rollout arrangements will not drive the development of the national framework, they will inform it, as will evidence from pilots and trials in other jurisdictions. Work will continue to enable and encourage alignment between the Victorian project and the national framework. Where necessary, transitional arrangements will be
developed in a manner that does not compromise the consumer protections established in Victoria.

Other transitional arrangements also may be necessary to progress consumers from their current electricity arrangements to the new opportunities provided by smart meters. This paper is an input into policy development on appropriate transitional arrangements.

1.4 Purpose of this paper

This Draft Policy Paper Two continues the consultation process to consider the national consumer protection and safety arrangements required to support smart meters.

In August 2009 the SCO released for consultation the Smart Meter Consumer Protection Review – Draft Policy Paper One (Policy Paper One), which outlined a range of consumer protection issues with reference to the NECF First Exposure Draft. SCO released an interim update in conjunction with the NECF explanatory material in December 2009 and, following stakeholder submissions, published a further paper in December 2010 (SCO Response).¹

This Draft Policy Paper Two addresses the following:

• issues not resolved from Draft Policy Paper One;
• more advanced smart metering services which were not addressed in Draft Policy Paper One, for example, direct load control and the home area network; and
• issues which have emerged over time and which impact on consumer protection and safety arrangements.

A draft policy position is presented where EMRWG considers that an appropriate option has been identified. Consultation questions are posed where further consideration is required before a policy position can be developed. Stakeholder submissions are invited on the draft policy positions and consultation questions. Officials will develop final policy positions in response to these submissions.

Table 1 in Attachment B sets out all the issues which were initially addressed in Policy Paper One and indicates whether they are addressed in this paper. New issues raised specifically in this paper are also identified. All draft policy positions and consultation questions raised in this paper are set out in Attachment C.

1.5 Implementation of new smart meter consumer protections

This paper only considers the consumer protection implications of smart meters. It does not review those matters already settled in the NECF. Neither does the paper propose any specific rule changes to either the National Electricity Rules (NER) or the National Energy Retail Rules (NERR). It is expected that draft rules to implement the final policy positions will be developed as necessary once the final decisions are agreed and published by the SCER.

The final policy positions will form part of a package of national smart meter consumer protection measures. Where an issue can be appropriately resolved in the national

¹ These papers are available at http://www.re.t.gov.au/Documents/mce/emr/smart_meters/default.html
instruments, amendments will be proposed for those instruments. Amendments may be proposed by the SCER directly to the Australian Energy Market Commission (AEMC). If this is the case, the AEMC would undertake its normal rule change process, which includes consultation on the proposal and the draft rule. This process normally takes six to nine months.

Where an issue is more appropriately addressed by an individual jurisdiction, resolution of the issue will be a matter for each jurisdiction to consider and progress as appropriate. It is expected that any changes to these instruments will be made by the usual process for changing such instruments.

1.6 Relationship to other processes

Other processes are also likely to impact on the consumer protection and safety arrangements developed for smart meters. In particular, EMRWG expects to liaise with the AEMC as it progresses Stage 3 of its Review of Demand Side Participation (Power of Choice Review). In this review the AEMC will investigate and assess the market frameworks in the NEM that would be necessary to maximise the economic value to consumers from services enabled by new technologies, including smart grid or smart meter technologies.

As this review addresses the consumer protections required for all types of services facilitated by smart meters, it is unlikely that it will be affected by the AEMC’s work on maximising the value of these services to consumers. However, this review will consider closely the AEMC’s progress and incorporate all relevant considerations.

These reviews, and the experience gained with smart metering services as more smart meters are rolled out nationally and internationally, will necessitate ongoing monitoring of both regulatory arrangements and consumer protections to ensure they are updated if necessary.

Economic regulation of smart meters, including distributor cost recovery, is being considered in a separate process and is not expected to have any bearing on the consumer protection arrangements.

1.7 Submissions to this paper

EMRWG is seeking written feedback on the draft policy positions and consultation questions presented in the paper. Stakeholder comments should be confined to the consumer protection issue raised. It is not the intention of this process to reopen issues settled in the development of the NECF, and any changes will be made to ensure consumer protections for consumers with smart meters.

The policy considerations in the draft policy paper are not settled by EMRWG and further stakeholder feedback is sought to guide a final policy position.

EMRWG acknowledges that this paper contains a large number of draft policy positions and consultation questions. In general, the consultation questions are asked to seek stakeholder feedback on a particular issue. Some questions are quite specific, as this paper builds on substantial stakeholder input in identifying issues through the first stage of the review. Not all issues will be relevant to all stakeholders, so stakeholders should not feel obliged to respond to all questions.
Where possible, stakeholders are requested to provide supporting evidence for their positions.

EMRWG welcomes general comments on the issues raised, as well as responses to the specific questions asked. A table is provided to assist stakeholders in providing responses. However, should you wish to provide comment in a different format, please do so.

All Stakeholder comments will be considered by EMRWG.

Submissions will be published on the SCER website. Whilst we prefer submissions to be public we do recognise that some submissions may contain confidential information. If you do not wish your submission, or parts of your submission, to be made publicly available please clearly state this in a covering email.

Written submissions on the draft policy paper may be submitted electronically by close of business on 2 March 2012 to:

Manager, SCER Secretariat,

Department of Resources, Energy and Tourism

GPO Box 1564

Canberra ACT 2601

EMRWGSecretariat@ret.gov.au

1.8 Structure of this paper

This paper has three Parts.

Part A looks at the pricing, demand management and customer billing implications of smart meters. It particularly focuses on the implications of potential new pricing arrangements and their impacts on different customer groups, how demand management products which might enhance the benefits of smart meters could be introduced, and what changes need to occur in the information provided on customers' bills.

Part B considers how consumers and the community may be more involved in understanding and benefiting from new metering and pricing arrangements, how any privacy implications could be managed, and how customers could be assured of continuing independent and effective dispute resolution mechanisms.

Part C examines how the technical and safety issues associated with meters, in particular smart meters, can be managed. It considers options for addressing the implications for low income consumers if their electrical wiring requires attention, and how to ensure that customers’ premises are remotely energised safely. It also outlines the Australian Standards applying to radiofrequency emissions associated with smart meters and other similar technologies.
PART A – PRICING, DEMAND MANAGEMENT AND CUSTOMER BILLING

Smart meters record electricity consumption in half hourly intervals and send this information back to the meter provider electronically at least daily. This is in contrast to the accumulation meters widely used in Australia which simply measure how much electricity has flowed through them since they were installed. From an accumulation meter, the quantity used in any given period is determined by subtracting the previous reading from the current reading.

The additional information provided by smart meters enables new pricing arrangements to be offered. They will enable tariff structures to enhance efficiency in electricity markets by better reflecting the costs of producing and delivering electricity at different times. Consumers could benefit from these efficiencies if they choose more flexible tariff arrangements that better reflect their cost of electricity.

There are a significant number of issues which impact on these potential new pricing arrangements. For small consumers, particularly domestic customers, their tariff structures and consequential bills are relatively straightforward. With smart meters, consumers can choose from a range of new tariffs and pricing arrangements, most of which will be unfamiliar. They also can choose from a range of different services in the market place which will be enabled by smart meters and will assist them to manage their energy consumption and therefore their bills. The implications of these new arrangements are important for customers and must be carefully planned and implemented, both through the regulatory frameworks and by the industry.

This Part A examines a number of these issues. It considers the new pricing arrangements which may become available to customers, and the appropriate consumer protections in a transitional period and in the longer term. These protections may be especially necessary for low income and vulnerable consumers.

The section also considers two demand management services – supply capacity control and direct load control – which potentially could benefit both industry participants and consumers. There are also opportunities for third parties to provide these services to consumers. The offering of these services has critical implications for consumers. This paper addresses a number of issues arising out of these market developments.

Finally, this section considers a small number of matters impacting the information that is provided to customers on their bills, and the role of the Australian Energy Regulator (AER) in monitoring whether there are issues arising from the new arrangements enabled by smart meters.
2 New pricing arrangements

EMRWG recognises that the transition from current tariff arrangements to new pricing arrangements will impact consumers in different ways. Some consumers, such as those who consume a relatively high proportion of their electricity at off-peak times, would be better off even if they took no action as prices would be lower at these times. Other consumers would potentially benefit if they are able to change their consumption patterns to take advantage of lower prices at different times. Others may not be able to benefit because they are unable to be as flexible with their electricity use. The design of new tariffs and the choices available to consumers will impact how these new tariffs affect individuals or specific groups. EMRWG’s policy objective is to mitigate any potential adverse impacts of new pricing arrangements for consumers and to consider any transitional arrangements. These factors are examined in this chapter.

This chapter seeks to address these issues by:

• providing an overview of the two major cost components of the retail electricity price, namely distribution and wholesale electricity costs and reviewing the existing pricing arrangements and some implications that arise from these cost components;
• introducing three new pricing structures that would be enabled by smart meters and then considering some of the issues that would be presented if these were implemented. Some policy positions are stated and some questions are posed;
• addressing transitional issues, considering the particular needs of vulnerable consumers.

2.1 How electricity is currently priced

For small customers, all the different components of retail electricity cost are typically bundled together into a final retail tariff. The final retail tariff may be regulated in some jurisdictions. A customer’s final bill is currently determined by the structure of this retail tariff and the amount of energy they consume.

In determining the tariff structure and the price for electricity, retailers take into account their obligations to pay network businesses for their services, the costs in purchasing electricity in the wholesale market, their own costs for providing retail services, as well as the costs of any regulatory requirements that may apply in a particular jurisdiction.

The wholesale cost of electricity and the cost of distribution typically represent the largest components of the retail tariff. Other costs, such as transmission and retailer operating costs are generally smaller by comparison.

• Distribution costs are driven by peak demand. This is necessary to avoid outages occurring when demand rises to its highest level. The result is that electricity customers pay for a significant amount of network infrastructure that may only be needed under extreme circumstances.

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2 Other components which make up retail energy, bills such as transmission costs, retail costs and margins, costs of renewable energy programmes and GST are outside the scope of this paper.

3 There are many other potential pricing arrangements, however, the three presented in this paper, Time-of-Use, critical peak pricing and critical peak rebates are considered to sufficiently identify the issues.
Wholesale electricity costs vary with time of day and season and, subject to generating plant availability, are generally correlated with temperature. If overall electricity consumption is high, wholesale prices can 'spike' to very high levels for a short time, reaching more than one hundred times the average price. Retailers may protect themselves from these high prices by entering into hedging contracts or investing in their own generating facilities. The wholesale market is also designed to deliver sufficient generation to meet peak demand to a high degree of reliability.

The current pricing arrangements are mostly based on the currently installed accumulation meters. These meters do not enable the price paid for electricity by retail customers, individually or groups of customers, to reflect cost drivers at different times: i.e. the prices offered reflect average costs.

Retail tariffs comprise both the distribution costs and the wholesale costs. In setting retail tariffs, retail and distribution costs are often 'bundled' together.

2.2 Retail tariffs and contractual arrangements

The retail tariff structure, which is usually a flat tariff for general usage⁴, is, in most cases, relatively simple for consumers to understand. The way these tariffs are set varies across the jurisdictions. All jurisdictions have a form of “standing contract” for small customers where the terms and conditions of these contracts are determined, or approved, in accordance with the relevant jurisdictional laws by jurisdictional regulators. In all jurisdictions but Victoria this includes the application of regulated retail price caps.

The NECF will maintain the existing requirement that electricity retail contracts will continue to be offered by the retailer, encompassing both the network and the retail tariffs. Under the NECF all retailers in participating jurisdictions must offer customers a standing offer contract which adopts the model terms and conditions set out in the National Energy Retail Rules. Whether the price of electricity sold under these contracts will continue to be subject to retail price regulation is a matter to be determined by individual jurisdictions. Jurisdictions have agreed under the Australian Energy Market Agreement (AEMA) to the removal of retail price regulation where effective competition exists.

Where retail contestability exists (i.e. customers can choose their energy retailer) customers can choose between a standing contract, which contains regulated prices for small customers (in all jurisdictions except Victoria), and a market contract, which is determined by the retailer but has a set of common minimum terms and conditions set by Government. Under market contracts, retail tariffs may be structured in many different ways. A typical small customer pays:

- a fixed supply charge usually in cents per day; and
- a variable usage charge based on the volume of electricity consumed, in cents per kilowatt hour (kWh).

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⁴ Note that many consumers have separately metered appliances such as hot water heaters usually charged at a lower, off-peak rate.
The amount that customers pay for electricity depends on their overall consumption, but not generally on when that consumption occurs. This reflects the capabilities of the accumulation meters widely used in Australia. With smart meters in place, it would be possible for either the distribution tariff or the retail tariff, or both, to be restructured.

### 2.3 Potential new pricing arrangements

The introduction of smart meters changes the cost structure for retailers:

- network costs charged by distributors are likely to reflect an individual consumer’s load profile; and
- wholesale energy settlement will be based on an individual retailers’ customer’s actual energy data rather than on the net system load profile.

It is likely that retailers may wish to reflect these different cost structures in their retail tariffs.

Three potential tariff structures, which would be enabled by smart meters and are expected to be available to consumers, are discussed in this section. These are:

- Time of use pricing (TOU)
- Critical peak price (CPP) tariffs
- Critical peak rebates (CPR)

The potential availability of these tariff structures, or other demand management products, specific to groups of customers in specific network areas, creates a fourth set of issues: “locational network pricing”. There is also the possibility of demand or capacity pricing, which is generally available for large industrial and commercial consumers. These will not be considered for small customers in this paper, due to the current limited experience with this approach for small customers.

The different pricing arrangements could apply as follows. The possible benefits for consumers from each tariff structure are set out in Table 1 below.

<table>
<thead>
<tr>
<th>Type of tariff</th>
<th>General description</th>
<th>Implications for Consumers</th>
<th>Implications for Distributors</th>
<th>Implications for Retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of Use (TOU)</td>
<td>Charges based on the time of day energy is used with higher charges at times of peak demand and lower charges at off-peak times</td>
<td>Will reduce cross-subsidies between consumers, with some consumers better off and others worse off.</td>
<td>Can reflect the shape of load</td>
<td>Better aligned with wholesale costs</td>
</tr>
<tr>
<td>Critical Peak Pricing (CPP)</td>
<td>A high price charged during specified critical peak periods, such as a</td>
<td>Consumers will benefit from lower prices at</td>
<td>Can be an effective tool to reduce demand at times of extreme pressure on</td>
<td>Can be used to manage wholesale price peaks</td>
</tr>
</tbody>
</table>

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*It should be noted that limited TOU pricing is available in some states, based on interval meters.*
<table>
<thead>
<tr>
<th>Type of tariff</th>
<th>General description</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Consumers</td>
</tr>
<tr>
<td>wholesale price peak or temporary network constraint, often caused by extremely high demand days (usually related to high temperatures)</td>
<td>other times. Need to reduce consumption for a relatively short time. May disadvantage those with no discretionary load. Trials have indicated that consumers are able to understand and respond to CPP</td>
<td>Can be an effective tool to reduce demand at times of extreme pressure on the network, potentially avoiding network failures and blackouts. May avoid the need for network augmentation.</td>
</tr>
<tr>
<td>CPR (rebate)</td>
<td>A rebate, or lump sum cash payment, is paid for reducing consumption during a specified time</td>
<td>Participating consumers may get cash payment to reduce demand. Some studies indicate this is less effective at reducing demand than CPP pricing</td>
</tr>
<tr>
<td>Locational Pricing (or availability of certain tariffs in specific locations)</td>
<td>Different price structures based on location within the network or service area, or alternatively the provision of demand management options specific to particular areas.</td>
<td>Some consumers may not be happy at having to pay more as their network is upgraded when consumers in other areas have not had to pay extra in previous years</td>
</tr>
</tbody>
</table>

### 2.3.1 Time of use pricing

A TOU pricing structure provides consumers with a differentiated price that better reflects the costs of supplying electricity depending on the time of day. Higher prices are charged at times when the cost of supplying electricity is higher (generally this is at times of peak demand), and lower prices when the cost of supplying electricity is low. TOU tariffs may be set by both retailers and distributors, but only offered by the retailer in its contractual offer to small customers.

### 2.3.1 Critical peak price tariffs

CPP refers to a structure with a very high peak price just at times of peak network demand and/or high wholesale prices (generally only a few days a year). In return, customers are provided with discounted charges in other periods. There are a range of different implementation options that have been used for this type of tariff. Typically CPP involves a period of high peak pricing up to around 6 hours in length, which is notified to customers on
this tariff between two and twenty four hours ahead so that they can to respond accordingly. Consumers would be advised of these events via SMS, email or other methods.

CPP tariffs could be set by both retailers and distributors, but only offered by the retailer in its contractual offer to small customers.

2.3.2 Critical peak rebates

An alternative to CPP tariffs is Critical Peak Rebates which would reward consumers with a direct payment for reducing demand below a baseline level during a number of peak time periods, with their prices at other times being unaffected. This contrasts to CPP tariffs where consumers face higher prices during peak time periods in return for lower prices during other periods.

CPR could be offered by the retailers and distributors, but the times and durations of the critical peaks may be different for these parties. The implications of these differences are discussed in section 2.4.3.

2.3.3 Locational pricing

As discussed above, one of the main components of the cost of retail electricity is the cost of distribution services.

It is common to think of distribution networks as if they are a single homogenous unit, but they are not. Electricity demand is influenced by a number of factors, including weather, which can vary significantly over a single distribution area. For example, the age of a suburb influences the style of housing found there, which in turn has implications for electricity demand, and the cost of supplying that area.

Locational pricing means structuring tariffs based on local circumstances. This would enable distributors to signal a need for demand responses in specific areas to defer network augmentation, without affecting consumers in other places. It could be implemented, for example, by targeted offering of CPR products.6

2.4 Enabling consumers to benefit from the new pricing arrangements

The new pricing arrangements enabled by smart meters have the potential to provide significant benefits to consumers. These benefits are dependent on:

- TOU/CPP and other retail price offerings being available for those who want them.
- Flat tariffs and/or stable payment arrangements (bill smoothing) being available for those who prefer simplicity.
- Consumers being able to navigate the energy retail market and make an informed assessment of what suits their particular circumstances. This implies being informed enough to be able to understand offers, having access to their consumption data and

6 These could be augmented by locally targeted offering of direct load control
energy efficiency information and advice, and being able to switch suppliers/offers easily.

- A smooth transition path to support consumer understanding and acceptance of new arrangements.

This section considers some of the implications of different tariff arrangements as they apply to distributors, retailers and customers.

### 2.4.1 Network TOU pricing – peak period

To reduce the cost of distribution services, price signals would need to robustly lead to reliable reductions in peak demand. To achieve this result, a distribution tariff structure would need to lead consumers to choose to use electricity at a different time of day, known as load shifting.

Chapter 6 of the National Electricity Rules (NER) gives distributors significant flexibility regarding tariff structures. For tariff structures with two or more parts (for instance tariffs containing a peak and off-peak price) the NER requires that the elements of the tariff must take into account the long run marginal cost and whether customers on that tariff are able or likely to respond to price signals. However, the extent to which Chapter 6 of the NER and the regulatory regime administered by the AER incentivises distributors to implement tariffs in this way is unclear. Absent particular incentives to do so, there is no particular reason to expect that they will set tariffs in such a way to maximise the impact on peak demand, although nothing prevents them from doing so.

As smart meters will enable changes to the way the distributors may wish to structure network tariffs, it is important to understand whether the rules in Chapter 6 of the NER are adequate to enable new network pricing structures which encourage load shifting to occur and benefit consumers.

### Box 2 Consultation Question 2.1 - Setting network tariffs

2.1 Are there any changes required to the rules and regulations including the relevant sections of the distribution pricing rules in Chapter 6 of the National Electricity Rules, as a result of the potential new pricing arrangements enabled by smart meters?

### 2.4.2 Retail pricing structures

Where retail prices are regulated, retailers are required to pass regulated network charges on to their customers in the same form as they are levied by distributors. For unregulated retail prices, network charges are a cost to the retailer; the retailer decides how to recover these costs when setting its retail tariffs – some retail tariff structures may reflect the underlying network costs, others may not. The way that they absorb or pass on these charges is a commercial decision for each retailer. It may form part of their differentiation within a competitive retail market.

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See National Electricity Rules, section 6.18.5
However, if a retailer chose to structure its prices differently to the wholesale energy costs and underlying network tariffs, there would be a risk that the two may be misaligned and the retailer would not cover its costs. Where a retailer builds a risk premium into its pricing, it potentially exposes itself to being undercut by a retailer who is prepared to take a greater commercial risk. Therefore, there is some reason to expect that even in an unregulated market, retailers will structure their prices to reflect the network tariffs they pay, although there is some evidence from other markets (Ontario) that many consumers prefer flat tariffs and retailers are prepared to offer these to consumers. Ensuring consumers are able to access a variety of different tariff arrangements is discussed further in section 2.5.1.

In addition, retailers face a number of different incentives including the need to set their retail prices to reflect the volatility and level of the wholesale electricity price; the need to optimise their margins given their underlying trading position; and the need to attract and retain customers.

Retailers may be able to increase their profits by extending peak pricing times, and thus higher peak prices, beyond wholesale market peaks. In a competitive market they would be constrained in doing this by their competitors, giving them an incentive to keep prices low to attract and retain customers, which could also be achieved by offering longer off-peak periods.

However, in uncompetitive markets, or where full retail contestability has not yet been introduced, there is less imperative for retailers to develop price structures that are attractive to customers. In the long term the best approach may be to encourage competition to introduce this pressure; in the short and medium term, jurisdictions could consider how to facilitate the offering of a range of tariffs to consumers to meet varied consumer needs.

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**Box 3 Consultation question 2.2 – retail tariffs**

2.2 How can effective choice of tariffs for consumers be facilitated given likely network pricing behaviour and retailer pressures?

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**2.4.3 Critical peak tariffs and critical peak rebates**

Both CPP and CPR have the potential to bring widespread benefits by reducing demand at peak times. They are likely to be more effective than TOU structures, mainly because the price signal is stronger. In addition, critical peak events would be infrequent, so consumers would be less likely to become ‘immune’ to them than the peak rate under a more conventional TOU tariff.

However, the peak demand on the network will not necessarily coincide with high price events on the national electricity market, especially when the latter are influenced by demand in other states. Therefore, retailers and distributors may seek to implement CPP or CPR events at different times reflecting their different incentives.

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8 For example, high demand in Victoria might lead to high prices in South Australia. The same could happen in other neighbouring regions.
There are a number of implications for consumers with this unfamiliar pricing arrangement. First, the retailers’ possible offers are quite different from the current flat rate arrangements and, therefore, have significant potential to be confusing. The retailers’ offers may not explain the implications of the contractual arrangements. This may lead to consumers receiving unexpected price shocks on critical peak days.

CPP tariffs and CPR also raise some additional health and welfare concerns. Whilst infrequent, a CPP event is likely to be called in extreme weather conditions and has the potential to adversely impact the health and wellbeing of consumers vulnerable to these conditions. For these reasons, EMRWG considers that CPP tariffs and CPR must be offered voluntarily and only agreed to by a consumer with explicit informed consent.

Under the NECF, only retailers may offer tariffs directly to small customers. This being the case, all CPP tariff offers must be made by the retailer, not the distributor. Distributors may offer a rebate or cash payment directly to customers, for reducing their demand during peak times with no effect on the tariff.

Nevertheless, any regulation must be designed so as not to unduly constrain the development of different types of contracts nor present barriers to the introduction of an important demand response measure of benefit to all parties.

It may be appropriate to set out minimum contractual terms and conditions in the NERR, or minimum content for CPP contracts. Minimum content in the contract needs to include: the length of the critical peak period; the number of events over a period of time; if events may be called on consecutive days; and the amount and type of notice of any event. Alternatively, regulation could require high-level contractual requirements, with the AER required to develop guidelines on how the products must be offered and explicit informed consent received.

This would make clear the requirements on industry for a CPP contract and allow a basis for consumers to compare CPP offers, with the required terms and conditions.

**Box 4 Draft Policy Positions 1, 2, 3 – Critical peak price tariff and critical peak rebates**

1. Critical peak price tariffs can be set by both distributors and retailers, but only offered by retailers.

2. Critical peak rebates can be offered by retailers or distributors.

3. Critical peak pricing tariffs and critical peak rebates must be offered as a voluntary product and only established with a customer’s explicit informed consent.

**Box 5 Consultation Questions 2.3, 2.4 and 2.5 – Critical peak price tariffs**

2.3. What supporting arrangements might be put in place to help consumers gain a better understanding of and benefit from CPP tariffs?

2.4a. Should minimum terms and conditions be specified for CPP contracts?

2.4b. If so what specific issues might be covered?

2.5. Should there be protocols on how a distributor may offer a CPR and a retailer CPP or CPR offers to the same customer?
2.4.4 Locational availability of time varying pricing

Network costs are typically smeared across all network consumers within a distribution network, with the tariffs reflecting the cost of supplying electricity to consumers in each tariff class. This results in cross-subsidies across the networks and customer classes, although customers with a similar connection and usage profile are required to be treated on an equal basis.

Network constraints are often localised, affecting consumers in a defined area. Constrained areas may vary from year to year as the network is augmented. However, all consumers can gain if demand in a very specific area is reduced at critical times. Therefore, a significant proportion of available benefits might be achieved by offering appropriate tariffs only in fairly small parts of the network.

In many jurisdictions distributors are not precluded from offering different tariffs to consumers in each tariff class, which allows different tariffs to be offered to consumers in different locations. However, while locational tariffs are possible in most jurisdictions, issues such as transaction costs and the likelihood that consumers will respond to price signals need to be considered.

The issue for this review is whether locational pricing may disadvantage consumers based on where they live. For example if they live in a constrained area, they may face higher prices than consumers elsewhere on the same network.

For these reasons, it is considered appropriate that locational network pricing continue to be voluntary. This could be based on incentive payments to consumers, effectively sharing the cost-saving benefit of demand management. However, this may reduce its effectiveness.

Box 6 Consultation Question 2.6 – Locational pricing

2.6 What alternatives to tariff-based incentives might be facilitated through smart metering in order to manage locational network issues?

2.4.5 Load control tariffs

Currently, some customers have dedicated off-peak tariffs for particular loads, such as hot water space heating and pool pumps, with air conditioning control also available in some areas. These loads are hardwired and metered separately. Conditions generally apply to these off-peak tariffs, including hours of supply and the load that may be supplied for each tariff, including the ability to boost supply.

The arrangements differ within the jurisdictions. Some tariffs currently applied in the different jurisdictions would not be possible with a single element smart meter on TOU rates. Introducing single element meters on TOU rates could disadvantage some existing customers.

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* Current legislation in some jurisdictions such as South Australia requires that network charges should not be any greater for consumers based on location.
if they make no changes to their pattern of consumption. This would be especially relevant for off-peak hot water customers, whose systems often heat during the day (at available times), if the heating occurred during peak times at peak rates.

Similarly, the number of consumers with slab heating is relatively small, and alternative heating options are available, along with incentives to adopt these in some cases.\(^\text{10}\)

Further, although the off peak rate under a TOU tariff might be higher than current off peak rates, it would be more widely available. Whereas off peak rates can now only be used for water and slab heating, the off-peak component of a TOU tariff would apply to all consumption at relevant times. As well, the relevant times may be extended, including to weekends. Customers may be disadvantaged as their existing cross subsidy is removed, however, there will be steps they can take to mitigate this effect and perhaps reduce their bill.

### Box 7  Consultation Question 2.7 –Load control tariffs

2.7. How can the issues for consumers who lose access to dedicated circuit off–peak rates be addressed?

### 2.5  Supporting arrangements in moving to new pricing arrangements

Many consumers have limited knowledge of and engagement with their electricity consumption and may not understand the new pricing structures sufficiently well to take advantage of new opportunities. However, there are some measures which may help consumers to better understand the different offers in the market place and enable them to transfer to different contractual arrangements with some confidence and without penalty. The NECF, and the Australian Consumer Law (ACL), also provide robust consumer protections against improper and illegal marketing practices. EMRWG does not propose changes to these provisions in this paper. It is also important to ensure effective competition to enable consumers to access a wide range of different tariffs.

These issues are discussed below.

#### 2.5.1  Should TOU pricing be mandatory or optional for consumers?

The potential benefits of TOU pricing are readily apparent for both distributors and retailers; however, they may not be so apparent for many consumers. Forcing consumers to accept retail TOU tariffs could lead to some consumers, including some vulnerable consumers, facing substantially higher bills. These consumers may currently consume more than the average consumer in peak times and may find it hard to shift load to off-peak times. In addition, some consumers may not fully understand the impact of the new tariff structures and others may need time to adjust their consumption habits.

Currently, there is a moratorium on any new network time-of-use pricing enabled by smart meters in Victoria. Retailers continue to be able to offer peak and off peak rates, but any decision about new network time-of-use pricing will be informed by the outcome of a

\(^{10}\) For example the Victorian Energy Saver Incentive Scheme provides an incentive to replace inefficient heating systems.
comprehensive study into the potential impact on consumers. This study will consider how time-of-use pricing would affect the affordability of electricity for different types of consumers, including disadvantaged members of the community. The outcomes of the study will form part of the Victorian Government’s review of the AMI program. Queensland has announced voluntary TOU pricing arrangements from mid 2012 and NSW already has voluntary TOU tariffs.

Where consumers are offered a choice between a TOU price or a flat tariff, it is likely that consumers who could benefit by moving to a TOU price with little or no change in their consumption behaviour will do so and reduce their bills as a result. Those who consume a higher proportion of electricity at peak times may prefer a flat tariff and have little incentive to move to a TOU tariff. If this occurs, the underlying cost of the flat tariff would increase and retailers may consequently over time raise the flat rate tariffs for those consumers.\(^\text{11}\)

Notwithstanding this, encouraging consumer choice of tariffs is important to the public understanding of new tariff arrangements. This is especially so in the transitional period as consumers increase their understanding and adjust to new pricing arrangements and opportunities available to them.

One potential solution is to ensure that every consumer can continue to access a choice of tariffs, including a flat tariff if they wish. This may be a competitive market outcome or may be achieved through regulation. This could be done by making the standing contract a flat tariff. Another approach would be to require all retailers to offer a choice of tariffs including a flat standing offer tariff.

However, requiring flat tariffs in the market may expose the retailers to financial risks if they are paying a network TOU tariff for that same consumer. This risk would be reflected in a higher flat tariff than is currently the case. To mitigate this impact, it could be possible to ensure that there should also be a variety of network tariffs which reflect consumer choices of retail tariffs.

### Box 8 Consultation Questions 2.8 – consumer choice of tariffs

- **2.8a.** Should retailers be required to offer a range of retail tariff offers to customers, including flat tariffs?
- **2.8b.** If retailers are required to provide a range of tariff options to customers, does this also mean that distributors should also offer a range of network tariffs to retailers?
- **2.8c.** Should these arrangements, if adopted, be transitional? If so, what conditions need to be satisfied before the arrangements can be reconsidered?

#### 2.5.2 Transferring retailers without penalty

Many consumers are unlikely to be fully informed about their electricity consumption until they have had a smart meter for a period of time. They potentially may be offered different contracts before they are able to evaluate which is the best tariff for them. Engagement with consumers at an early stage is crucial, but even with this, it is likely that some consumers will make errors and sign contracts without the appropriate supporting information. In these

\(^{11}\) This effect has been demonstrated in NSW with Inclining Block Tariffs, and in Tasmania with pre-paid tariffs.
circumstances, consumers may feel more confident in signing contracts knowing they can change a contract if they subsequently find that it’s inappropriate for them.

Studies in the UK show that significant numbers of consumers (up to a third) choose energy contracts that cost them more than their previous contract, and this may be worsened by complexities around TOU pricing structures\(^\text{12}\).

In Phoenix Arizona, some retailers offer time-varying prices where customers taking these offers have the option to switch back to a flat tariff if they choose, but are then required to remain on the flat tariff for a minimum contract period. Consumer engagement and education play an important role in offering these products. Offers of this nature would increase consumers’ confidence in time of use tariffs and ensure that take up remained voluntary.\(^\text{13}\)

Exit fees in contracts are a legitimate part of risk management for the retailer, but they may also deter consumers from taking up new arrangements and may inhibit the realisation of benefits for consumers. This would suggest that there would be some merit in a transitional period for consumers to be able to move easily between different tariffs without penalty in order to build consumer confidence and understanding of the new arrangements.

This would be in addition to a consumer’s rights in situations where they are misled. The protections against this are in the NECF and the ACL and will remain in place.

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**Box 9 Consultation Questions 2.9– Transfers without penalty**

2.9a. Should there be a transitional period which allows consumers to move between contracts without penalty?

2.9b. If so, what conditions need to be satisfied before the arrangements can be reconsidered?

**2.5.3 Supporting informed choice for consumers**

More complex tariff structures may also lead to some consumers being sold or choosing inappropriate products. It would be expected that many groups who are vulnerable consumers (for example the elderly, or those from non-English speaking background) are also less likely to be able to deal with the increased complexity. These effects are likely to be especially acute in the early stages of the transition and will require careful handling, including wide scale and effective consumer engagement and education.

Retailers are required to produce an Energy Price Fact Sheet to assist consumers in comparing offers, and comply with the format specified on the energy pricing guidelines. These fact sheets will be publicly available and must be given on request and when an offer is made. As the fact sheets use standard terminology, this may make the offers easier to understand. The AER comparator website is also referenced on the fact sheet.

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\(^{13}\) US Federal Energy Regulatory commission Assessment of Demand Response and Advanced Metering Staff Report August 2006
Most jurisdictional regulators or departments already collect data and monitor the distributors’ and retailers’ performance in relation to reliability, quality and price of electricity supply. In the national market, there could be a role for the AER to continue this monitoring and to include the new pricing structures to consider whether there are barriers to consumers benefiting from the new arrangements.

One method which may assist consumers to navigate through potentially complex price structures is an independent switching website. Although there are a number of commercial websites comparing retail offers, the quality of their service is reported to be variable.\textsuperscript{14}

In accordance with the NECF, the AER is in the process of developing a price comparator website to assist consumers. This will compare the standing price and market prices that are “generally” available; therefore, if new pricing structures become available through smart (or interval) meters, the AER will be required to include these in their comparator service.

The Commonwealth is also considering the availability of electricity consumption data through an energy information hub, which could enable consumers, or their nominated representatives, to access raw consumption data from smart and interval meters. Access to such data would enable more accurate assessment of different offers.

\textbf{Box 10} Consultation Questions 2.10 and 2.11 – Supporting informed choice for consumers

2.10. What arrangements need to be put in place to reduce complexity for consumers and assist them to understand the different offers in the market?

2.11a. Does there need to be monitoring of new pricing arrangements to ensure that complexity does not impede the realisation of demand response and consumer benefits?

2.11b Should the AER undertake such monitoring?

\textbf{Box 11} Consultation Question 2.12 – General transitional arrangements

2.12 Are there any other transitional arrangements that would help consumers adjust to new pricing arrangements?

\textbf{2.6 Mitigating the impact of new pricing arrangements on vulnerable consumers}

The introduction of new pricing arrangements may mean that some consumers face a higher total bill than they would have under current retail pricing arrangements. This may pose problems for some vulnerable consumers who are unable to respond to the new arrangements.

Consumers who are most likely to be affected adversely are those who are unable, or unwilling, to shift their consumption to times when prices are lower. Groups possibly in this

\textsuperscript{14} Johnson, Mai, 2011 \textit{Briefing paper energy switching websites}, Consumer Utility Advocacy Centre, Victoria
situation include those at home during the day such as the elderly, those with chronic conditions, shift workers, the unemployed and parents with young children.

Assessments on the impacts of TOU pricing on vulnerable consumers are mixed. Some suggest that these vulnerable groups are more at risk of increased prices because they are more likely to be at home during peak times. They are also less able to change their behaviour than the average consumer due to poorer quality housing, inability to afford more efficient appliances and potential inability to understand how to take advantage of new contracts and tariffs.\(^{15}\)

Other studies have shown that low-income groups are likely to gain more benefits than the average consumer, even without shifting load by changing their current usage patterns, for example through energy efficiency improvements. It has also been suggested that low-income groups are actually able to respond favourably by changing their energy usage \(^{16}\). Understanding these impacts is an important part of trials and studies in Australia and around the world.

Some of the possible effects on bills for different consumers are set out in Table 2 in Attachment D and mapped against possible supporting policy responses.

There are various measures already in place to assist vulnerable consumers to better manage their energy bills. In particular, the hardship provisions in the Law and Rules, concessions regimes and Community Service Obligations may be used to manage price impacts on vulnerable consumers, including those least able to respond to any TOU tariffs.

Whether any of these measures should or could be strengthened is discussed below.

### 2.6.1 Permanent flat tariff option

The implications of making TOU pricing optional and ensuring that consumers could access a range of tariffs including flat tariffs for a transitional period for all consumers was discussed in section 2.5.1. In this review, and in other consultations, consumer groups have submitted that this option should not necessarily just be transitional for more vulnerable groups.\(^ {17}\)

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<thead>
<tr>
<th>Box 12 Consultation Question 2.13 – Permanent flat tariff for vulnerable consumers</th>
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<tr>
<td>2.13a. Should a flat tariff option be available for vulnerable consumers on a permanent basis?</td>
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<tr>
<td>2.13b. Should that option be required for both standing offers and market offers?</td>
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\(^{16}\) The Impact of Dynamic Pricing on Low Income Consumers, June 2010, The Brattle Group

\(^{17}\) See consumer groups submissions to the Victorian Government’s Review of the advanced metering infrastructure program by the Department of Treasury and Finance
2.6.2 Hardship provisions in the NECF

Draft Policy Paper One considered the potential consumer impacts of TOU pricing and found that existing protections in the NECF were adequate to support consumers who may fall into hardship, or have an existing hardship situation exacerbated, due to TOU pricing. It was proposed that no changes were needed to hardship provisions in the NECF for TOU pricing structures.

This position was affirmed in the SCO response to submissions on the paper. SCO proposed that the AER monitor the impact of TOU tariffs in its hardship programme indicators, and indicated that it would consider relevant outcomes of the ESCV review of smart meter consumer protections.

The ESCV has required that retailers recommend the most appropriate tariff to a hardship customer, considering their circumstances, and monitor the customers’ behaviour to ensure they continue on the most appropriate tariff, and facilitate a change if necessary. Under the NECF, a retailer’s hardship policy must include processes to review the appropriateness of a hardship consumer’s market retail contract, and a retailer must review a market contract when a consumer requests to pay by Centrepay. While the ESCV decision is consistent with this position, requiring the retailer to recommend the most appropriate tariff for all hardship consumers is a stronger requirement than imposed under the NECF.

The NECF also provides for the AER to identify hardship program indicators and for retailers to report against these indicators. The hardship program indicators must cover entry into hardship programs, participation in hardship programs and the assistance available in the hardship program. Given smart meters support a variety of tariff structures, it is appropriate to have a wider range of indicators and information, in particular monitoring the proportion of hardship consumers on TOU tariffs, and to assess whether hardship consumers are overrepresented on any particular tariff type. Changes to the NECF may be needed to implement this position.

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<tr>
<th>Box 13</th>
<th>Draft Policy Position 4 – Hardship provisions</th>
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<tr>
<td>4. The AER should monitor whether hardship consumers are overrepresented on any particular tariff type.</td>
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<th>Box 14</th>
<th>Consultation Question 2.14 – Appropriate tariffs to hardship consumers</th>
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<tr>
<td>2.14. Should retailers be obliged to recommend the most appropriate tariff to consumers in their hardship program?</td>
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2.6.3 Concessions regimes

Each state and territory has its own concessional regime to meet particular social objectives. A comparison of some of the main concessions currently available in each state and territory is in Appendix E.

Whilst energy concession regimes are a jurisdictional responsibility, the tax and benefits system also provides general financial support to certain groups of people.
The transition to time of use pricing raises some important questions in relation to these concessions regimes, namely:

- Are they adequate for those who face higher costs and are unable to respond to TOU prices?
- Does their structure undermine the value for the consumer of being able to undertake demand response?

Concessional regimes are not intended to compensate all consumers who may face higher bills as a result of a smart meter roll-out. Rather, the concession framework needs to remain effectively targeted to assist vulnerable consumers without reducing the net benefits of consumers better managing their energy use.

During the transition to new pricing arrangements, some consumers may face a large increase in their bills before they are able to adjust their consumption behaviour and may fall into a temporary period of hardship as a result. If hardship policies are not considered sufficient to ameliorate these impacts, then concessional regimes may need to take transitional hardship into account.

This could be done via a direct payment or loan, for example as available in emergency circumstances in most jurisdictions. The case for transitional arrangements will be strongest when consumers are not able to remain on flat rate tariffs (where these represent the best tariff option) or face limited choices in relation to their preferred tariff structure.

Some tariffs may also make seasonal bills more volatile, although this effect may be offset by a movement towards monthly billing, which may smooth consumer’s regular payments. Concessional arrangements for some States may need to take this potential seasonal volatility and the possible introduction of monthly billing into account.

Concession regimes however should not be designed in such a way that they remove price signals that enable demand management to be successful. Consumers receiving concessions should still be able to benefit from reducing or shifting their energy use in the same way as other consumers.

**Box 15** Concession regimes

Recognising that concession regimes are a jurisdictional responsibility, States and Territories may wish to review their concessions frameworks in light of the services supported by smart meters.

2.6.4 Community Service Obligations (CSOs)

Governments have established energy CSOs to both address concerns about possible market failures and pursue specific social policy objectives. CSOs remain the responsibility of state and territory governments. Examples of a CSO are requirements that consumers of a similar type supplied through the distribution system pay a similar price for their electricity no matter where they live, or a subsidy (the CSO) to lower the cost of delivered electricity in these areas.
CSOs are established to fulfil a social policy objective through retailers where it is uneconomic for them to do so. Some CSOs may interact with the services supported by smart meters, such as time-varying pricing.

Whilst CSOs are a jurisdictional responsibility, they may need to be reviewed to ensure that they are still adequate to meet their objectives in the context of new services that are enabled by installation of smart meters and whether they could be redesigned to complement and support the broader economic objectives.

Further, CSOs that subsidise the cost of providing energy to certain classes of consumer may undermine the effectiveness of price signals that encourage demand response. If CSOs are to continue to operate in a way which provides benefits to their recipients with minimal impact on the energy market or effect on energy producers and consumers more generally, it will be important for governments to review the needs of recipient groups and the design of CSO programs.

The Energy Community Service Obligations National Framework was released by MCE on 2 October 2008. The Framework sets out high-level principles for consideration by State and Territory Governments when developing Energy CSOs. This framework is designed to be used by State and Territory Governments as best practice guidelines in developing CSOs but is not binding upon the States and Territories. The CSO framework also takes into account the interaction with demand response.

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<th>Box 16 Community service obligations</th>
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<td>Recognising that CSOs are jurisdictional responsibility, States and Territories may wish to review their CSO frameworks in light of the services supported by smart meters.</td>
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3 Third Party Service Providers

Consumers have historically dealt with their distributor for network and connection services and with their retailer for energy services and overall billing.

New service providers, often referred to as third parties, are also able to offer services enabled by smart meters that will benefit consumers. Third parties are not a feature of the market at the moment, yet they can play a significant role in assisting consumers with the more complex data and decisions arising from smart meters. The term “third party” is used because they are not the traditional market participants (that is: retailers or distributors). However, third parties could also be agents acting on behalf of a distributor or retailer.

It is anticipated that third parties would offer a range of services. These would include information services to help consumers manage their power usage and bills, and compare market offers. These services would depend on the accessibility of the customer’s detailed consumption data available from smart meters. With customer consent, third parties might also offer direct load control services which would allow them to control certain appliances through the smart meter, in exchange for an offsetting benefit. The third party might also be a “load aggregator” who obtains a benefit in the wholesale market from aggregating load reductions and then shares the benefit of these with its customers. Third parties may also be able to provide services such as independent price comparison services that may not always be provided by retailers.

In principle, EMRWG supports a role for third parties and recognises that as part of a competitive market this development will benefit consumers. Consideration needs to be given to how they interact with consumers and the market.

This section considers the issues for third parties entering the market, the range of services that third parties could offer, and the conditions under which these services could be offered.

In considering this issue, EMRWG is concerned to ensure that consumers can realise the benefits offered by third parties and to determine if there is a need for any regulation and consumer protection to ensure a satisfactory consumer experience.

3.1.1 Third party provision of smart meter services

The Rules or regulations do not currently provide for third parties. Nothing prevents interested parties from engaging with consumers in a way that does not require access to the smart meter, and in this case the general Australian Consumer Law and privacy law would apply. However when the smart meter and other parties are involved consideration must be given to the following questions:

- What is needed to ensure that third parties comply with security and privacy requirements?
- How would third parties access the systems and processes that enable linking to the consumer’s equipment through the smart meter?
• Would third parties need accreditation to use market systems and processes that are available to retailers and distributors and managed by AEMO?

• What is the process by which a third party becomes authorised, and more specifically, does a customer’s consent suffice to authorise access by a third party to control their appliances through a smart meter?

There is an overarching question about the extent to which consumer protection and other regulation needs to apply to third parties when they offer services to customers. General consumer law would apply, but should the NECF consumer protection regulation and jurisdictional Ombudsman schemes also apply to third parties?

There is also the question of whether changes are necessary to:

• ensure that current participants in the market properly facilitate third party activity,

• provide for dispute management, and

• provide for enforcement where there is non-compliance.

Additionally, there are potentially material risks for retailers and distributors associated with third parties which may need to be considered.

Third parties would need to comply with all privacy requirements, and the extent of the application of the NECF consumer protection framework needs to be considered. To avoid market distortions, third parties would need to operate under the same regulatory arrangements as retailers and distributors where they are offering similar services.

It is not anticipated that third parties will need licensing. However the industry arrangements may need to ensure that third parties are appropriately qualified and authorised.

Box 17  Consultation Question 3.1– Issues for third parties in market

3.1. Are there further issues to those outlined above that need to be considered for third parties who are not agents of the distributors or retailers?

Box 18  Draft Policy Position 5 – Third parties service providers

5. EMRWG considers, except for the case of the provision of customer’s data, that there are important issues to be resolved in providing for third parties in the market framework and systematic consideration should be given to these issues in the overall development of market arrangements for the delivery of smart meter services to consumers.

This paper specifically considers issues related to third party offers of supply capacity control, direct load control, and messaging in section 4.4.3, 5.2 and 8.5 respectively.

3.1.2 What further services can be offered by third parties?

Any consideration of the totality of services that third parties could offer needs to take into account that the customer also has a contract with an authorised retailer who has the overall role as the power provider.
All services offered by a third party through the smart meter should be subject to consent and be “opt-in”.

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<tr>
<th>Box 19 Consultation question 3.2 and 3.3 – Third party services</th>
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<tr>
<td>3.2. What services - other than those listed above - could be made available by third parties though a customer’s smart meter?</td>
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<tr>
<td>3.3. What controls should apply to third parties in relation to such service offerings?</td>
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4 Demand Management – Supply Capacity Control

The supply capacity control (SCC) function of a smart meter provides the technical capability to set a maximum capacity limit on a customer’s rate of energy usage and/or a limit to the rate of energy input into the grid from on-site or embedded generation. This means that customers could determine in advance the maximum rate at which they intend to consume energy in a set period and in return they would be offered a financial incentive (such as a lower per unit charge on their consumption). Once this pre-determined capacity limit has been reached the electricity supply to a customer’s premises would be switched off temporarily.

Consumers could avoid exceeding their limit by restricting the number of high-consumption appliances they use at the same time.

The agreement for a supply capacity limit could potentially be entered into with a distributor, retailer or a third party who provides demand management services.

4.1 Consideration of issues in Draft Policy Paper One

In Policy Paper One, SCO examined the use of SCC by both distributors and retailers and acknowledged that there were a number of unknowns in relation to its application by these parties. At that time, no changes were proposed to the NECF to regulate the involuntary use of SCC by distributors to manage emergency situations, subject to further consideration of the issue. SCO considered whether SCC could be offered by retailers to assist customers to avoid de-energisation of supply, on the understanding that this would be a last resort in the process.

In submissions to the earlier policy paper, consumer groups noted their support for the use of SCC by distributors for emergency network management, but voiced their strong opposition to allowing retailers to use SCC at all. In particular, these groups were concerned that, as the threat of de-energisation sometimes acts as a trigger for consumers to seek assistance with managing their bills, the alternative of SCC may result in these consumers not seeking assistance and continuing to experience unnecessary hardship.

SCO was persuaded by these views and recommended that SCC be prohibited for retail credit management purposes in the NECF. The SCO Response however was that there may be potential value in allowing retailers broader access to this functionality, subject to appropriate access arrangements and consumer protections. SCO also wanted consideration given to whether other parties should be allowed to offer SCC as a discretionary product. It proposed therefore to further consider SCC in a broader context in this Draft Policy Paper Two.

4.2 Supply capacity control as a demand management tool

There are three broad contexts for the use of SCC supported by smart meters.

The first context for the use of SCC, that has universal support, mirrors an existing network management capability. This existing capability provides each customer on very constrained
supply lines, usually single-wire-earth-return (SWER) lines in rural areas, with a supply capacity limiting switch that cuts off supply if they exceed their limit and must be manually switched to re-establish supply.

Secondly, the distribution businesses may use SCC in times of a supply emergency or network stress. SCC would allow a distribution business to place capacity limits on supply points in a broad area and still allow a limited supply, rather than cut power supply to the area completely in an emergency. SCC functionality could also allow the distributor to restore power to an area gradually and securely once the emergency has abated.

SCC also may be offered as discretionary products by distributors, retailers or third parties to consumers. In this case, the consumer might agree to limit supply to their premises when certain conditions prevail in return for a financial incentive. The particular capacity limit would be agreed with the consumer in advance.

This paper aims to determine whether and, if so, under what conditions, SCC can be:

- employed in emergency management by distributors; and/or
- offered to consumers as a discretionary product by distributors, retailers and/or third parties.

EMRWG notes that SCC was not specifically considered in the NECF to date. This being the case, future changes to the NER and NERR would be required to implement the proposed consumer protections for the use of SCC.

### 4.3 SCC as a mandatory function for network emergencies

The SCC functionality of smart meters may assist distributors to avoid wide-spread load shedding in emergency situations and improve the efficiency of network management. As noted, the use of SCC for network emergency situations is generally supported by consumer groups, even though consumers may not have a choice about the operation of these products. Consequently, EMRWG considers that the use of SCC for these purposes is clear and appropriate.

In its recent final decision on the use of capacity control products, the ESCV acknowledged that SCC may be used by distributors in emergencies to ration power and avoid outages. However, its use by distributors outside of emergencies was not sanctioned without further regulatory consideration in that jurisdiction. The ESCV will permit customer trials of supply capacity control products on a voluntary basis, and subject to the products being fully explained, appropriate information being given to customers, and an explanation of the costs and benefits of such products. The final decision also confirms that the use of SCC for the primary purpose of credit management will not be permitted before least 1 January, 2014.

EMRWG considers that the broader use of SCC by distributors for network management, including planned interruptions to supply, is not so clear cut. As planned outages often are localised, even to a few houses, it is not so apparent that this should necessarily be imposed on consumers without choice. The use of SCC by distributors for these purposes is therefore considered in 4.4.1 below.
6. Distributor-initiated SCC will be allowed for emergencies to manage network demand.

4.4 SCC as a discretionary consumer product

4.4.1 SCC as a discretionary distribution product

Enabling distributors to offer such products to consumers would appear to have clear benefits, particularly the potential to delay network augmentation to cope with increasing peak loads. To the extent that SCC in these circumstances improves network efficiency, it is reasonable to expect that all consumers more broadly would benefit from generally lower network tariffs.

Most consumer group submissions supported the use of SCC for network management purposes. In their joint submission to Policy Paper One these groups indicated that they did not oppose distributors offering discretionary SCC products subject to the explicit informed consent of the customer to the contract and a number of other protections under the NERR.

If distribution businesses were allowed to offer these products, they would be subject to the same electricity marketing rules as currently apply directly to retailers (noting that these businesses already are subject to the Australian Consumer Law). However, distributors currently do not have direct contractual arrangements with small customers for SCC, although they are able to do so under the NECF. Therefore, consideration needs to be given to whether the existing rules should be modified, or additional rules applied to the distributors in these circumstances.

If customers agreed to SCC for planned interruptions, the existing rules for the interruption to supply under the NECF would appear to apply. The relevant provisions in the existing rules also outline what steps the distributor must take prior to and following the interruption, including notification requirements. Nevertheless, given that a capacity-limited electricity supply will be a new concept for most customers, it may be that additional information should be provided to customers to enhance their understanding of how capacity control would apply in those circumstances.

7. Distributors should be allowed to offer SCC as a discretionary product to manage network demand, subject to the appropriate consumer protections being in place.

Consultation Questions 4.1, 4.2 and 4.3 - SCC as a discretionary distribution product

4.1. Are the existing planned interruptions of supply rules sufficient to protect consumers if SCC was offered as a product by distributors?

4.2. How ready are distribution businesses to offer these products to consumers?

4.3a What additional consumer protections, including marketing requirements, should be placed on distributors in offering these products to consumers?

4.3b What information should be provided to customers with these products, and who should be responsible for providing it?

### 4.4.2 SCC as a discretionary retail product

In its earlier deliberations, SCO believed that there was potential value in allowing retailers access to this smart meter function subject to appropriate access arrangements and consumer protections. This could enable the development of market offers which both provide customers with a discount on their electricity use and manage retailers’ exposure to the wholesale electricity market, leading to a lower-priced offer to customers. SCO agreed however that it was not appropriate that SCC form part of any retailers’ standing offer tariff.

Many consumer groups question the truly ‘discretionary’ nature of the SCC product. They consider that the customers most likely to take up discretionary products would be those who already have, or foresee having, difficulty paying their electricity bills.

Conversely, retailers considered that the capacity to offer these products in the future will provide them opportunities in the competitive market to differentiate their products and services. EMRWG therefore is considering this matter further in Draft Policy Paper Two, although it also expects that no retailer is prepared to offer these products in the market for some considerable time.

The gross benefit to consumers in SCC products is twofold: the receipt of a financial incentive, such as a lump-sum payment or tariff reduction, and the ability to strictly control the amount of energy used by the household and so the size of the bill. However, EMRWG is sympathetic to the view put by consumer groups that the consumers to whom those benefits would appeal are likely to be under significant financial pressure even if they are not in a retailer hardship program. Therefore, if a consumer forgoes access to electricity in order to prioritise other purchases or to avoid falling into hardship, it raises important questions as to whether the SCC product has truly delivered a net benefit.

To inform its deliberations, SCO sought advice from its smart meter stakeholder committee (the National Stakeholder Steering Committee NSSC) on the minimum kilowatt level required to run basic household appliances within the home. The NSSC have subsequently advised that determining a minimum electricity supply necessary to run basic household appliances is complex because the requirements for energy vary depending on factors such as the number of householders, type of dwelling and available energy sources (for example, whether gas can substitute for electricity).

In its June 2011 Draft Decision on capacity control products the ESCV concluded that, owing to the uncertainties surrounding the full potential of smart meter technology and consumers' response to the technology, it is too early to make a decision on the use of SCC for non-credit management purposes. The ESCV confirmed its earlier decision that the products could not be used for credit management purposes until 1 February 2014.
EMRWG nevertheless is cognisant of the industry's views that there are circumstances where SCC products may be offered as a discretionary product by retailers and are not taken up by those customers already in financial hardship or perceive a SCC product as a means to avoid such hardship. These circumstances could be where consumers deliberately wish to control their electricity consumption by active demand management, for example, in holiday homes or in homes with high consuming products. These consumers are not, by definition, those with low incomes.

Consequently, EMRWG seeks to understand these circumstances more fully prior to determining its policy position on the offering of SCC as a discretionary retail product. Notwithstanding this consultation, and for avoidance of doubt, EMRWG reaffirms the view that the use of SCC as an alternative to disconnection should be expressly prohibited in the NECF. Under any circumstances, it must only be entered into with explicit informed consent and cannot be offered to any customers entering or participating in a hardship program.

**Box 23 Draft Policy Position 8 – SCC as a discretionary retail product**

8. For avoidance of doubt, SCC may not be used as an alternative to disconnection action and may not be offered to any customers entering or participating in a hardship program.

**Box 24 Consultation questions 4.4 – SCC as a discretionary retail product**

4.4a. In what circumstances might consumers benefit from SCC as a discretionary retail product?

4.4b How ready is the market to offer these products?

4.4c What consumer protections should apply if these retail products were offered?

4.4d How could the risk of ensuring that these products are not offered, or accepted, by consumers as a means of avoiding de-energisation or mitigating financial hardship be managed?

### 4.4.3 Offers of SCC by third parties

SCC operates by limiting the customer’s entire supply below a contracted value. It signals to the customer that the supply has exceeded the limit by switching the entire supply off for a short period. While SCC can be a form of demand management it operates on the entire supply rather than an individual appliance so consumer protection requirements need to be commensurate with the impact of operation of this service. Hence consideration needs to be given to whether SCC should be available to be offered by third parties and if so what would be the conditions associated with third parties offering this product.

Some third parties may act as agents of distributors or retailers; others may operate independently, for example by signing-up customers, aggregating the contracted demand limit and selling to different retailers or distributors. Therefore they should be treated as equivalent to operating as an agent for retailers or distributors and thus, to avoid market distortions, third party service providers would need to operate, as far as possible, under the same regulatory arrangements as retailers and distributors.
All these third parties would be subject to general consumer laws. However, only those third parties who are acting as agents of the distributors and/or retailers are subject to the National Energy Retail Law (NERL) and Rules obligations that their contractual arrangement with those entities creates.

Consideration may need to be given to making changes to the Rules or other jurisdictional instruments to ensure their compliance with similar regulation, including adherence to the Ombudsman schemes.

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**Box 25  Draft Policy Position 9 – Third party offers of discretionary SCC**

9. EMRWG considers that at least the same controls as apply to retailers and distributors should apply to third parties regarding any offer of SCC to consumers as a discretionary product.

### 4.5 Use of SCC with embedded generation

The minimum functionality specifications for smart meters also provide the capacity to apply a SCC limit to the export of energy to the grid from an embedded generator.\(^{19}\) This would normally be used for network management purposes, but could possibly be used to limit a business’ exposure to feed-in tariffs.

There may be good technical reasons to limit the amount of power being fed into the grid, particularly for potential emergency situations. While consumption can to a large extent be controlled, embedded generation without active voltage and frequency control, including for example, PV systems, can stress the grid. The consumer sets some parameters such as capacity of the system, but the actual generation output of the PV system will vary depending on the incident solar irradiance and temperature.

As PV module ratings are based on output under defined standard test conditions, it is possible for grid-connected PV modules and systems to produce up to 10% more than their rated output, under some meteorological conditions. Where penetration of PV systems is high and the small-scale residential inverter has no active voltage and frequency control capability, and if a distribution network operator manages voltage simply via the substation, and there is no matching load for them to supply, they could cause over voltage conditions close to acceptable operating limits on some parts of a feeder on sunny days. This risk is currently managed through standards for inverters, which require them to turn off at times of over voltage.

In such situations SCC limits may be needed, but applying SCC would disconnect many PV customers on sunny days when no other problems were threatening the grid. If their power goes off under ideal generating conditions, consumers are likely to be very dissatisfied, resulting in a real risk of alienating the most energy-aware and committed consumers.

Further, where consumers have installed grid-connected micro-generators including PV systems, they would have a reasonable expectation that they could export any surplus energy

\(^{19}\) From the consumer’s perspective their PV system exports to the grid, and so this paper refers to export as sending power into the grid from the consumers premises.
to the grid, and receive the contracted feed-in-tariff. Where there is a possibility that this ability to export may be limited, consumers would need to be fully informed, suggesting that it is critical to obtain explicit informed consent.

There may be a case for only allowing this functionality to be used in emergency situations, with the capacity to export to the grid not restricted otherwise. However, this emphasises the need to define what such emergency situations could include and for these definitions to be a part of the relevant contract.

Box 26 Consultation Questions 4.5 – SCC and embedded generation

4.5a. Under what circumstances could export supply capacity control be used?

4.5b. Should energy exported to the grid be subject to a supply capacity limit?

4.5c. If so, how should this limit be set?
5 Demand Management – Direct Load Control

Direct load control (DLC) involves switching off or reducing the electricity consumption of appliances such as domestic hot-water heaters, air conditioners, pool pumps or, potentially, electric vehicle chargers. This could be done by the consumers, by their retailer or distributor, or by a demand aggregator.

By allowing particular appliances to be controlled, consumers can save money by switching their appliances to take advantage of lower electricity prices at different times of the day. This will especially be the case if they are on a TOU tariff and can therefore save money by allowing the use of their high electricity-consuming appliances such as air conditioners to be controlled.

DLC could be activated in a number of ways; for example by sending messages through a smart meter or the internet to a Home Area Network (HAN) that could control the appliance. The appliance could also be wired to a load control contactor or relay in the smart meter, which could directly switch the appliance off.

EMRWG notes that the NECF does not specifically reflect the DLC issues considered below. Future changes would be required to implement the draft policy positions, and support the widespread use of DLC enabled by smart meters.

5.1 Consideration of issues in Draft Policy Paper One

In Policy Paper One, SCO examined mechanisms by which customers could agree to put into place DLC contractual arrangements. The requirement for customers to give their explicit informed consent to any arrangements was emphasised.

In their submissions to that paper consumer groups agreed that obtaining explicit informed consent from customers for DLC was essential. In addition, they preferred that DLC be offered by distributors, to avoid any possibility that DLC might be used by retailers to manage customer’s debt.

SCO proposed that a customer’s express agreement to DLC arrangements could be effected through:

• a clause of the standard retail or distribution contract which only takes effect where informed consent is provided by the customer;
• part of a separate market contract agreed by the customer and retailer or distributor; or
• both, where the default terms in a standard contract (requiring informed consent before coming into operation) may be varied in a market contract.

The discussion in this section proceeds on the assumption that DLC products eventually may be offered competitively, at least by some parties.

Consistent with the discussion in Chapter 3, EMRWG acknowledges stakeholder concerns over the manner in which DLC will be implemented and the need for adequate consumer protections around this function. It also recognises that, DLC results in only some appliances being impacted. Nevertheless, EMRWG reiterates that if distributors, retailers and third
parties can contract with customers with DLC products, consideration must be given to all these possible relationships. Consideration must also be given to whether there are some customer groups who should be excluded from being offered these products and, if so, whether regulation is required to ensure this outcome. These and other matters are set out below.

### 5.2 Who could offer DLC

Currently, only distributors use small-customer load control (mainly hot water, slab heating and pool pumps, with air-conditioner control also available in some areas) to manage their networks. Retailers and demand aggregators typically deal with large customers to provide demand response into the market.

As with SCC, the reasons for any party offering DLC products may include:

- distributors, to better manage their networks in emergencies and at other times. It could be expected that the distributors will look to develop incentives to encourage consumers to take up these products.
- retailers, to reduce exposure to the wholesale spot market at times of high demand and price. In the competitive market, retailers will be keen to differentiate themselves from their competitors and offer a range of products.
- retailers or other third parties, as a component of a ‘home energy management’ product as a means to assist consumers to better manage or reduce their electricity bills. The third parties may seek to aggregate consumers’ load flexibility and sell to the consumer’s distributors or retailer.

Consequently, EMRWG concludes that all parties may have incentives to offer DLC in the market place and that such access should be supported, including for third parties. Nevertheless, as with SCC, third parties’ participation raises issues for further consideration.

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**Box 27 Draft Policy Positions 10 and 11 – Offers of DLC**

10. Distributors and retailers may offer DLC products and services to consumers.

11. In principle, third parties may also offer DLC products and services to consumers.

**Box 28 Questions for Consultation 5.1 – Third parties and offers of DLC**

5.1a. What issues arise for third parties who are not agents of the distributors or retailers in providing DLC products to consumers for energy management purposes?

5.1b. Are consumers sufficiently protected by these third parties’ compliance with the general consumer law or should consideration be given to incorporating these functions in the energy Rules?

### 5.3 Contractual arrangements

In its previous policy papers, SCO considered a number of possible options for enacting the contractual arrangements for DLC. Since that time, the NECF has determined the following arrangements:
small customers can enter negotiated contracts with their distributor; and
any negotiated terms within a retail standing contract will automatically change the nature of the contractual arrangements between the retailer and the customer. That is, if a customer provides explicit informed consent to any term different to the standard term, they enter a market contract.

As with any commercial arrangement, third parties intending to offer DLC services to consumers will need to enter a market contract with the customer.

Notwithstanding the clarity in NECF, these contractual options do present some challenges for all parties in the electricity market. The majority of small customers are used to negotiating market contract terms with their retailers, but this experience is not common with distributors. Although the distribution businesses’ deemed contracts with their customers contain minimum terms and conditions, new consumer protections and distributors’ obligations may need to be put in place (as discussed in 4.4.1).

Further, enabling consumers to contract directly with distributors and/or third parties may have implications for all parties, including retailers and their electricity sales contracts with their customers.

EMRWG considers that there are some important arrangements which could be incorporated into the NECF to govern DLC contracts. These are proposed because of the relative lack of experience that consumers will have with DLC products and, at least for a transitional period, should have additional protections to ensure that they are not adversely impacted in agreeing to use these products. These principles apply to whether consumers should be:

- subject to a maximum length of the DLC contract,
- allowed to exit a DLC contract without penalty during the period of the contract; and
- allowed to enter DLC contracts with different parties for different appliances.

In their submissions to earlier papers, consumer groups strongly advocated these contractual arrangements until such time that consumers are familiar with and have confidence in the smart meter services. EMRWG agrees that some transitional arrangements which directly impact the contractual arrangement may be reasonable, but that these should be reassessed for the longer term.

EMRWG nevertheless wants to understand further how the range of contractual arrangements will work in the market place prior to determining final policy positions on some of these arrangements.

**Box 29  Draft Policy Positions 12 13 14 – DLC contractual arrangements**

12. To access DLC customers will be required to enter into separate contracts with the distributor and/or retailer, and must give explicit informed consent to those contracts.

13. For a transitional period, DLC contracts would have a maximum length of 24 months and during the transitional period, customers will have the right to exit the contract without penalty.

14. In the longer-term, these contracts may contain a cost that the customer incurs for early termination of the contract. This must be clearly stated and reflective of the true cost to the business of this early cessation of the contract.
Box 30 Consultation Questions 5.2 – DLC contractual arrangements

5.2a. Are there any unintended consequences of enabling consumers to enter into DLC contracts with one or more parties?

5.2b What conditions need to be satisfied before the transitional arrangements (if any) can be reconsidered?

5.2c. What additional consumer protections, including marketing requirements, should be placed on distributors in offering these products to their customers?

5.3.1 Contractual arrangements – moving premises

DLC is considered a service provided to a customer at a particular address, and so should terminate when the customer moves house. It may be possible in some circumstances for contracts to be transferred to that customer’s new premises with the agreement of all parties (for example, where the controlled device is portable). However, as the infrastructure to provide DLC would in most cases remain at the same premises, the service provider could offer to provide the services to the new customer at that address.

Box 31 Draft Policy Position 15 – Contractual arrangements on moving premises

15. DLC contracts will terminate when a customer moves house, unless agreed otherwise with that customer. The terms must be clearly stated in the contract.

5.4 Consumer protections

The NECF and the ACL provide significant protections for consumers in their contractual arrangements with suppliers. These include robust unfair contract terms in the ACL. However, as DLC is a new product and recognising the considerable reservations expressed by consumer groups that more vulnerable consumers will potentially be disadvantaged by these products, it is considered appropriate to examine other consumer protections to determine if they should be enhanced or included, in the national framework. These protections include whether the:

- explicit informed consent provisions are sufficient;
- exclusion of certain classes of customers, such as customers on life support and customers dependent on other types of medical equipment, should be considered;
- notification requirements should be regulated; and
- customers could over-ride their load control arrangements.

The additional consumer protection requirements on distributors have been addressed in section 5.3 above.

5.4.1 Explicit informed consent

The NECF defines explicit informed consent and outlines the procedures to be followed to obtain it. These include the information that must be provided to consumers to ensure that their consent is truly informed. However, further requirements in relation to DLC contracts
may need to be developed, especially during the transitional period, to ensure that consumers fully understand the nature of the contract they are entering into.

Electricity retailers are relatively well experienced in obtaining this explicit informed consent already, as they have been operating in the regulated competitive market for some time. This is not the case with the distribution businesses, and it can be assumed that many third parties have also not been subject to such regulatory requirements. It may be that specific guidelines are required particularly for these DLC services to ensure that the parties understand their obligations in properly obtaining this informed consent.

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<th>Box 32</th>
<th>Consultation Questions 5.3– DLC and explicit informed consent</th>
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<tr>
<td>5.3a.</td>
<td>Are there additional steps to those in the NECF and ACL which should be taken by parties offering DLC to ensure that explicit informed consent is obtained?</td>
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<td>5.3b.</td>
<td>Should guidelines be produced to assist parties to obtain this consent?</td>
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<tr>
<td>5.3c.</td>
<td>Who should develop and monitor these guidelines?</td>
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5.4.2 Should any consumers be excluded from being offered DLC?

While DLC will be potentially available to any consumer, appropriate provisions are needed to mitigate any risks for consumers with health needs. Current NECF arrangements place an obligation on retailers and distributors to ensure supply of electricity to customers reliant on life support equipment. As such, any life support equipment is already implicitly excluded from being directly controlled.

DLC contracts should enable consumers to better manage their bills and therefore may be seen as a positive demand management tool. The requirement to obtain explicit informed consent will mean that no consumers can be compelled to sign a DLC contract. However, EMRWG acknowledges consumer groups’ concerns that some consumers in financial difficulty may be persuaded to enter DLC contracts as a mechanism for managing their debt, as a substitute to being offered other assistance by retailers.

There are, however, certain groups of consumers with medical conditions who may be potentially adversely affected by having appliances such as air conditioners on load control, but who do not have the same protections as those registered with life support equipment. For example, people suffering from medical conditions which increase sensitivity to heat may require protections so that they are not adversely affecting by the cycling and control of air conditioning under DLC arrangements. There are likely to be other groups of people for whom a decision to place load control on their air-conditioner could have serious impacts.

| Box 33 Draft Policy Positions 16 17 18 – DLC and consumer exclusions |
|--------------------------|------------------------------------------------------------------|
| 16.                      | Appropriate provisions would be incorporated into the NECF to ensure that DLC services would not be offered to customers registered with medical life support requirements. |
| 17.                      | No customer will be required to involuntarily place any appliance on DLC, including as a condition of participation in a hardship |
18. Retailers must demonstrate that, if customers on a hardship program have agreed to a DLC service, this service is co-ordinated with all other assistance provided to those customers.

**Box 34 Consultation Questions 5.4 – DLC and exclusions**

5.4. Are there any groups who should not be offered DLC services?

### 5.4.3 Notification of load control activation

Customers on load control could be informed whether the service is on or off with respect to relevant appliances. However, this may incur extra costs for DLC providers, with little clear benefit for customers, particularly if the DLC is applied to a pool pump, when it may be that the customers are not so affected by the load control. However, it is less clear if this is the case if the load control is applied to air-conditioning. Nevertheless, EMRWG understand that in most trials of DLC, customers have not been informed precisely when their load is being controlled and there have been no adverse reports from these customers.

**Box 35 Consultation Question 5.5 – Notification of load control**

5.5. Should customers be informed when load control is activated?

### 5.4.4 Customer ability to override load control

Consumer groups have argued that customers should have the ability to override control of their load control devices. This, it is argued, would promote consumer acceptance of DLC and provide additional safeguards. This could be a safety net for some consumers, but it could also reduce load control benefits.

There may be merit in suppliers offering manual override facilities to customers as part of their contract. As all contracts are market contracts and subject to explicit informed consent, such a facility would be optional. It is likely however, that customers who wish to have this service would be offered less beneficial contracts than those who do not require override facilities.

Further, it is understood that this manual override may have technical limitations. That is, it may not be possible to override load control on air-conditioners and, for other appliances, the override may only last for one hour (e.g. hot water). Consequently, the application of the override function in the market place may be confusing for consumers.

**Box 36 Consultation Question 5.6 – DLC and manual override**

5.6. As the manual override of some DLC services may produce adverse consequences for customers, including reduced financial benefits, is it a service which should be offered in a contract?
6 Customer Billing

The bill provides valuable information to customers on the amount of electricity they have consumed during the billing period and how much it has cost them. With an accumulation meter the amount and complexity of information displayed on the bill is relatively straightforward and familiar to customers.

In a smart meter environment the amount of consumption and pricing information that could potentially be included in the customer’s bill is much greater. It may also mean that bills are issued more frequently based on an actual meter read.

New pricing arrangements also may mean that customers are charged different prices depending on the time electricity was used. Ensuring that this information is accessible to customers on their bills in a form which reduces confusion and complexity will be crucial.

The NECF regulates how information is to be provided on customer bills and both retains some familiarity for customers and reflects the changing nature of the electricity market. Most of this regulation is relevant to customers who are billed on the basis of remote meter reads from smart meters, including comparative consumption information. EMRWG also notes the electricity bill benchmarking project, which is addressing the comparative energy consumption information to be provided on customers’ bills.

This policy paper therefore focuses only a small number of issues directly related to smart meters.

6.1 Consideration of issues in Draft Policy Paper One

Draft Policy Paper One proposed six policy positions related to customer billing. Three matters were confirmed in the SCO response, namely that:

• no changes are needed to the undercharging and overcharging provisions in the NECF;
• where a customer requests a copy of their historical billing data, retailers must be able to provide the full set of metering data on which the bill was based and a summary of the meter data on which the bill was based; and
• retailers should provide customers with consumption data for each tariff segment on their bill to assist them to reconcile their bill charges.

The three outstanding issues requiring further national policy consideration are discussed below.

6.2 Enabling customers to check their bill

The minimum functionality for smart meters requires that the accumulated consumption is shown on the meter display and the rules require that accumulated energy be visible on the meter. For many customers the ability to check their bill against the meter reading is an important source of reassurance that their bill has been calculated accurately. The SCO Response noted 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.

One means by which customers can achieve some reassurance in this regard is to check that the start and end reads on their bills are largely consistent with the readings on their meters. Some customers follow this practice now with accumulation meters. Retailers nevertheless have argued that, as bills derived from smart meters are likely to contain both estimated or substituted data, this is likely to make comparing an accumulated total on the bill to the actual reading much less accurate and useful for customers.

EMRWG understands that any accumulated figure shown on the bill will not match exactly what is shown on the meter, due to the lag between the meter reading and receiving the bill. This is currently the case now with accumulation meters, but the information still is regarded as being useful to customers. Further, EMRWG notes that the volume of estimated and substituted data is expected to be small (the implications of estimated and substituted data are discussed more fully in section 6.4 below).

Under the NECF, the retailer is required to include the details of energy consumption or estimated energy consumption, the average daily consumption, and the metering data the bill is based on. Importantly, the NECF also requires that each bill contains the values of the meter readings (or, if applicable, estimations) at the start and end of the billing period.

EMRWG notes that the ESCV has separately considered this matter and requires that the final accumulated read corresponding to the end of the billing period is displayed on the bill. The Commission, in its final decision on verifying bills, has required the accumulated start reading also be shown on the bill beginning from 1 July 2012, noting this date coincides with the planned adoption of the NECF in Victoria. The Commission further noted that some of the constraints identified by industry could be overcome with appropriate consumer information strategies and training of customer service staff.

EMRWG appreciates that just providing the start and end reads on the bill will not provide a customer with absolute certainty that their meter is reliable and their bill accurate. However, it continues the existing practice of providing such information to customers, which has contributed in some way to their confidence in their bills. Therefore, EMRWG considered that this information will partially contribute to customers’ confidence in their smart meters.

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<th>Box 37</th>
<th>Draft policy position 19 – Accumulated readings on the bill</th>
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<td>19. In accordance with the requirements of the National Energy Retail Rules, the bill should contain an accumulated total for the start and end reads derived from the smart meter.</td>
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EMRWG notes that while no NECF changes would be necessary, changes to industry processes and procedures may be required to implement this policy position.

### 6.3 Billing on Time Based tariffs

With TOU pricing, consumers need to know exactly when peak periods begin and end. Electricity consumption on the meter is recorded in Australian Eastern Standard Time (AEST), being the time the national electricity market operates. Because a time adjustment may be
applied to the metering data in the billing system, there appears to be no reason why tariffs need to be applied on AEST.

Where AEST is not the local time, applying tariffs on AEST rather than local time may confuse consumers, particularly the change between standard and summer time for daylight savings.

As most consumption patterns are based on the local time, tariffs based on this time will reflect customers’ actual load profiles. For market settlement purposes, the meter will operate on AEST. However, the Home Area Network (HAN) interface, which enables consumers to understand more directly their electricity consumption (and is discussed in Chapter 8), includes a time offset to allow the In-Home Display (IHD) to show the local time in displaying electricity use. This offset recognises that most consumers plan by local time, and that the effect of daylight saving is effectively to shift the load profile by an hour.

As the customer is billed by the retailer, EMRWG has concluded that the retail tariff should be applied in the local time in preference to AEST.

This policy position would be implemented through a future change in the NERR.

**Box 38 Draft Policy Position 20 – Time-based tariffs**

20. All TOU retail tariffs should be published as applying on the local time, rather than AEST and this should be clearly specified in the tariff information.

### 6.4 Displaying Estimations and Substitutions on the bill

Draft Policy Paper One proposed that retailers be obliged to show the scope of any estimation on the bill. While stakeholders generally agreed with the policy position it was suggested that a threshold approach be considered. In the response to submissions, SCO did not recommend a threshold be imposed at that stage. The AER would be asked to monitor the use of estimated and substituted metering data for billing.

SCO also indicated the work of the ESCV would be considered in developing a final policy position. In Victoria, the ESCV requires that retailers must inform customers if more than 96 intervals (or 48 hours out of a 90 days billing period) are not actual readings in any one bill. This decision was made in the context of the Victorian rollout and functional requirements, and the fact that smart meter TOU tariffs have not been widely introduced in Victoria due to the moratorium imposed by the previous Victorian Government.

In light of the complexities raised by this issue, particularly in relation to critical peak pricing (CPP), EMRWG is giving further consideration to the matter.

#### 6.4.1 How are estimations and substitutions treated?

Under current arrangements, accumulation meters for small customers are generally read on a quarterly basis. For many reasons, such as an inability to access the meter or a meter fault, actual data may not be available at the time of customer billing or market settlement. In these instances metering data is routinely estimated or substituted.
Although the incidence of estimates is expected to be greatly reduced where smart meters have been installed, as physical access to the meter will not be required, exceptional circumstances, such as a meter failure may mean that an estimated or substituted reading is used. The method used to calculate estimations and substitutions is contained in the metrology procedure administered by the Australian Energy Market Operator (AEMO). Estimated data will be replaced with actual data at some future time, while substituted data may or may not be replaced with actual consumption data. In both circumstances, the general policy is to substitute a value that best reflects the perceived electricity flow at the time. Usually, past consumption is used as the basis for estimation or substitution, but if past consumption is not available, other methods may be used as described in the metrology procedure.

For accumulation meters, the current rules require retailers to indicate whether the bill is based on an actual reading of the meter or on estimated data. This is relatively straightforward as there will only be one piece of information that customers have to understand – the bill will either be a complete estimate or an actual read. Any discrepancy between an estimated value and the actual consumption can be corrected when the meter is next read and the customer’s bill will be subsequently adjusted.

Substituted data is not so straightforward. Substituted data may be temporarily or permanently lost. If permanently lost, the customer’s bill can never be adjusted with the correct consumption data. The difficulty is that the retailer does not know whether the data is permanently, or temporarily, lost at the time they prepare a customer’s bill. Therefore, retailers are unsure as to whether the customer’s bill is based on substituted data which may or may not be adjusted at a future date.

EMRWG notes that the estimation and substitution rules were originally designed to facilitate wholesale market settlement for large customers. It considers that differentiating between estimated and substituted readings for the purposes of small customer billing will only lead to confusion for customers. Consequently, it concludes that, whether or not the consumption data is estimated or substituted, retailers should consider the data as estimated in providing information to customers. This would be implemented through future amendment of the NERR to make it clear that, when data estimated or substituted in accordance with the metrology procedure is used for billing, the data is described as estimated.

Box 39  Draft Policy Position 21 – Notification of estimates/substitutes on customers’ bills

21. In advising customers that a bill contains estimated and/or substituted data, retailers are to describe the data as ‘estimated’ in all circumstances.

6.4.2 Notification to customers of estimations

A central policy question is the extent to which customers should be informed of estimated readings on a bill based on smart meter consumption data. The principle that customers have a right to know the basis of any charges underpins the ACL and the requirement to indicate if the bill is based on estimated data in the NECF. EMRWG begins from the premise that customers should be informed, but discusses the extent of that information.
There are two approaches that could be adopted:

1. to determine a threshold above which the retailers must indicate on the bill the scope of estimated data; or
2. to require retailers to indicate whenever the bill is based on any estimated data.

The threshold approach adopted by the ESCV does not require that retailers advise customers of estimations below the threshold. EMRWG understands that the Commission was persuaded that this threshold was appropriate as it was considered that it would not have a material impact on customers’ bills (noting that the threshold amounts to approximately 2 per cent of the period of a three monthly bill) and that it would assist to mitigate customer confusion and concerns. This was considered particularly important in the transitional period in a mandated smart meter rollout.

Retailers, in their submissions to Policy Paper One, also argued that detailing estimations on the bill may confuse customers and incur costs in increased enquiries to call centres. Retailers argued that these costs would outweigh the benefits for customers.

EMRWG nevertheless considers that a key objective of the smart meter program is to increase customers’ awareness of electricity usage by providing them with greater information so they can better manage their consumption. The bill is, for most customers, the primary feedback mechanism on such consumption and EMRWG adheres to the principle that they should be informed if it is not based on the actual meter data. In particular, as increased access to metering data directly from the meter will be enabled by functionalities associated with smart meters, consumers will have better capacity to track the consumption as measured by their meter, and compare this expected consumption to the bill.

Further, EMRWG is concerned that the threshold approach may make it more difficult for customers to reconcile their bills. Confusion may arise when future adjustments are made to customers’ accounts, based on the replacement of estimated data with actual data, especially if customers were not informed the previous bill contained estimated data. While these amounts may be small, they would be unexpected and need to be itemised separately on the bill. If customers are unaware of any estimated data comprising their bill, and are subject to a readjustment particularly for an undercharged bill, the number of enquiries to retailers may also increase. As proposed in Draft Policy Paper One, requiring retailers to inform customers of the scope of any estimation on the bill would give customers a good indication of the materiality the estimation. It would be left to the discretion of the retailer how best to inform customers of the scope of estimation. This approach would accommodate the different materiality impacts of different tariff types, providing consistent information regardless of the tariff.

A threshold approach is considered reasonable where time of use pricing is not widespread and consumers have limited access to data directly from the meter using an IHD, as in Victoria. This being the case, there may be value in using the threshold as a transitional measure, with the threshold being subsequently reviewed. In any case, as consumers have a right to know the basis of their bill, retailers should inform customers of the threshold, and the possibility that the bill may contain estimated data.
As discussed below, EMRWG particularly believes that the treatment of estimations for customers on critical peak pricing also requires specific consideration. Because of the nature of critical peak pricing, any estimation on the bill during a critical peak is likely to have a more material impact on the bill. Under a threshold approach, customers on critical peak pricing would need to be aware that it is possible that data may need to be estimated during a critical peak period. Alternatively a different standard may need to apply in the case of data estimated in a critical peak period.

**Box 40 Consultation questions 6.1 and 6.2 - Notification to customers of estimations**

6.1. What are the costs and benefits of:

a) using a threshold approach?

b) showing the scope of any estimations on the bill?

6.2a. Should a threshold be applied to the reporting of the scope of estimations on the bill?

6.2b. If a threshold is used, how should this threshold be determined?

6.2c. How should customers be informed of the threshold if implemented?

### 6.4.3 Impact of estimations methodology on critical peak pricing

Draft Policy Paper One considered how estimations or substitutions would be addressed due to meter or communications failure in a CPP event.

In response to submissions, SCO committed to investigate options to address this issue, including commissioning advice from the NSSC on the estimations and substitutions methodology. It also acknowledged the potential liability issue for retailers if they are unable to charge on estimated or substituted data in these events.

The metrology procedure, which includes the methodology for estimations and substitutions, is administered through AEMO and is developed with active industry participation. EMRWG understands that, despite the efforts to ensure that the metrology procedure results in a realistic estimation of the likely consumption for any period when data is unavailable from the meter, there is some debate within the industry as to whether the methodology is entirely appropriate for periods when customer demand is expected to be significantly different from historical demand.

In the case of CPP tariffs, the current estimation and substitution methodology, being based on historical data, may substantially overestimate the consumption during a CPP event. Although the actual volume of estimated and substituted data is likely to be significantly

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reduced with the operation of smart meters, the potential impact on an individual customer’s bill could be significant.

The NSSC advice recommended that no changes be made to the metrology procedure to accommodate critical peak pricing and that further consideration be given to how the estimated data is priced. However, in order to ensure that consumers are not unfairly disadvantaged by industry processes in situations where they might have entered contracts with CPP, after considering the NSSC advice, EMRWG has considered the following options to address the current concerns.

1. **No change to current metrology procedures**

Retailers would be able to charge customers the applicable tariff on all data, whether estimated, substituted or actual metering data, with estimated or substituted data based on the current methodology. However, a CPP event is designed by using a price signal to encourage demand reduction and customers are likely to be aware of the events and how they responded to the price signal. If their response is not reflected accurately on the bill, it is likely to result in queries and dissatisfaction with the market operation. Customers are unlikely to be satisfied with an explanation from their retailer that the data was estimated or substituted in accordance with the metrology procedure, especially if their reduction in demand was effectively not recognised. This could potentially undermine confidence in CPP products and the market.

2. **Using historical data based on previous CPP events**

To allow the published CPP rate to be charged, the estimation or substitution methodology must give a value that is consistent with the customers expected response to the price signal. This could be based on past behaviour during a CPP event, using the last CPP event faced by that particular customer, if available, as the basis for estimation. In the case that data from a previous CPP event is not available for the customer, the estimation may be based on the behaviour of all customers on the tariff, to estimate the likely reduction in consumption, similar to the customer class method detailed in the metrology procedure.

Changes to the metrology procedure will be required under this option. As retailers may not call events on the same day, the like day would need to be the previous CPP event day called by the retailer. A method would need to be established so that meter data providers are informed of a CPP event and to identify which day should be used as the basis for any estimation of consumption for the period. This could potentially lead to a better estimate of the customer’s likely energy consumption.

3. **Charging customers a non-CPP price**

If data is estimated or substituted during a CPP event, customers could be charged on a non CPP price. This policy position was proposed in Policy Paper One. This option was not supported by retailers who were concerned that they may be exposed to unmanageable risk as they are not responsible for the meter or metering data, but remain liable for the wholesale cost of the energy. The liability is incurred by the retailer on behalf of the customer, but the retailer may be unable to recover the full cost from the customer. EMRWG acknowledges the potential liability risks faced by retailers with this option.
4. **No billing on estimated or substituted data during CPP periods**

Consumer groups were generally of the opinion that, where there was missing data during a CPP event, substitutions or estimations should not be permitted at all. This would mean that the risk may be borne entirely by retailers and would create a separation between wholesale and retail market responsibilities for retailers. This option was rejected in the SCO Response to Policy Paper One.

5. **Customers would have the right to challenge any estimated readings on their bill**

As customers would be informed of any estimated data on the bill, this could provide the basis for them challenging the methodology and consequently the amount of their bill. Although applying to all estimated bills, this would be especially relevant for the charging methodology used during a CPP event.

*Preferred position*

EMRWG’s preferred position is to base any estimation (or substitution) on the customer’s behaviour during past CPP events. This would give the best possible estimate of the likely energy flows during a CPP event, and prevent any complications in the billing system caused by having to charge for estimated data at a different rate.

Customers should also be given a right to challenge any estimated data, including data charged at CPP pricing, if they believe the estimate is not reasonable. This would need to be implemented through future changes to the NERR.

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<td>22. A customer’s past behaviour during the previous CPP event (if available) should be used in estimating their consumption in the event of a meter failure during a CPP event.</td>
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6.5 **AER monitoring of the use of estimated and substituted data**

The SCO Response recommended that the AER monitor the use of estimated and substituted data in small customer billing. This information could be included in retail market performance reports, noting that an amendment may be required to the NECF to enable the AER to obtain the information from the relevant parties. Nevertheless, this monitoring does relate to the AER’s compliance monitoring role in that customers should be provided with a bill based on an actual meter read every 12 months.
The monitoring of the use of estimated and substituted data for billing is one indicator to measure the reliability of the metering system, and to determine if any further policy action needs to be considered. This information could be used to inform future considerations of guaranteed service levels for metering data and treatment of estimated and substituted data on bills.

The use of substituted and estimated data can be monitored by a number of indicators, such as the number of bills containing estimated data, average proportion of estimated data on the bill, average number of consecutive intervals estimated and value of estimations. This data will give a good indication of the extent of estimated data for each retailer and distributor as well as the industry as a whole. In accordance with normal practice, it is expected that the AER will consult on the indicators used for reporting the use of estimated and substituted data. Rule changes may be required to give the AER power to request and report on the use of estimated and substituted data.

**Box 43 Draft policy position 24 – Monitoring of estimated and substituted data**

24. AER will have an ongoing role in monitoring the use of estimated and substituted data.
PART B – CONSUMER ACCESS AND ENGAGEMENT

Consumers do not have to understand or interact with their current metering arrangements to any large degree to receive benefits in the competitive electricity market. It is usually sufficient for them to be able to understand how their overall electricity consumption impacts their bills and be able to access adequate information to make informed choices about competitive offers from electricity retailers. The meters do not directly influence the products or services provided by retailers or distributors.

Smart meters, however, potentially provide more benefits to consumers, including access to detailed consumption data to help them manage their energy usage, thus reducing their overall bills; reduced or no cost for services such as special meter reads, de-energisation and re-energisation (disconnection and reconnection); and improved service levels by both distributors and retailers.

Realising these benefits, however, will be more complex for consumers simply because of the amount of data that is enabled by the smart metering technology and the different pricing arrangements they will be required to understand. Therefore, it is crucial that consumers are easily able to access relevant and useful data, that they feel confident that their information is sufficiently secure and protected by privacy laws, and that there continue to be independent dispute resolution mechanisms available to them, particularly for innovative products which may involve contractual arrangements with third parties.

Both distributors and retailers will need the active engagement of consumers to optimise the benefits for all parties. Consumers will need to feel confident in the market and sufficiently informed to engage. They also will need to have confidence that they will be able to voice their issues of concern and have those concerns listened to and acted upon. Consequently, a key consideration is how to ensure effective consumer engagement and which parties are best placed to provide the information to consumers.

This Part looks at how to achieve these objectives.
7 Consumer Engagement

Engaging consumers is an integral part of a smart meter rollout and will have a major impact on the overall effectiveness of the program. Successful engagement means two-way communication between consumers and those involved in the smart meter program development and implementation. Consumers need to be able to let those involved in the program, including government and industry, know their issues and concerns and then know that they can actively participate in communicating the relevant information on the program to the community. Only if consumers are provided with timely and useful information about the new meters and the services will their understanding of how they are affected by the change to smart meters and their capacity to select the most appropriate services for their needs be enhanced.

EMRWG therefore is committed to ensure that any consumer engagement program provides sufficient confidence to consumers and the community that they will be properly engaged in the development of the communication strategies.

The objectives of a consumer engagement program and communication strategies, which will effectively lead to achieving those objectives, apply whether there is a nationally-led mandated smart meter rollout or a widespread rollout is jurisdictionally or industry-led. EMRWG’s objective is to ensure that effective consumer engagement is well-planned and integrated with the implementation of any smart meter program. This section therefore addresses the components which must be contained in any consumer engagement strategy.

A key policy consideration is the role of Government in the consumer engagement program. The section also addresses how this role might be viewed, depending on the nature of the rollout.

7.1 Objectives of consumer engagement

In undertaking consumer engagement, it is important to be clear about the objectives that the program is to achieve. EMRWG considers that to assist consumers to better understand the smart meter program and to make informed choices about the benefits for them, the objectives of consumer engagement should be to:

• provide information about the rollout of smart meters and how it will affect customers;
• provide information about smart meters and how they operate;
• empower consumers to take control of their energy usage by showing them how they can access accurate and timely information about the services enabled by smart meters and the opportunities to reduce their energy usage and bills;
• provide a mechanism to enable consumers to directly provide information about their issues and concerns and have those concerns addressed; and
• increase general consumer understanding and acceptance of the smart meter program.

To achieve these objectives, engagement needs to be positive and emphasise:

• the benefits and costs to consumers of smart meters;
• why there is a need to make these investments; and
• how best to take advantage of the new technology.

EMRWG recognises that any transition to smart meters should be made as simple as possible for consumers. Therefore any consumer engagement program should emphasise, at different times during the implementation stages, the immediate and long-term benefits to consumers, including:
• increased control by consumers to understand and manage their energy consumption and bills;
• more accurate and timely billing;
• faster outage notifications and restoration times;
• increased access to energy efficiency and demand response programs to help lower costs;
• reduced inconvenience associated with meter reads and connections; and
• lower costs of connection when moving house.

All deployments of smart meters, whether government mandated or industry led, will be implemented over a number of years. A consumer engagement program should therefore set clear timelines and deliverables for each stage of the communications campaign over the whole period of the rollout. It should also have sustainable mechanisms whereby consumers can input their issues and concerns over this period.

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<td>7.2</td>
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### 7.2 Enhancing consumer understanding

All information provided to consumers must be clear, consistent, accurate, and trusted by those consumers. This will be fundamental to their understanding of the purpose of a smart meter program and how its implementation will directly affect them.

There are many potential sources of information on smart meters, including the Commonwealth and/or State governments, market bodies, industry representatives and consumer groups. However, many consumers may also source information through the media, word of mouth and the internet, with varying degrees of accuracy.

EMRWG therefore considers it important that governments are involved in the co-ordination of information exchanges between the different parties to avoid misleading or mixed messages and undue complexity for consumers. This involvement would help the community to better understand the implementation of the program and know that it has broad government and industry support.

The extent to which the different levels of government are involved will depend on the nature of the rollout and the jurisdictional implementation programs. In the absence of a government mandate for the rollout of the smart meters, it may be that the primary responsibility for
consumer engagement should fall predominantly on the parties providing the meters and the smart meter services.

Nevertheless, the broad principle is that there is likely to be a role for the Commonwealth Government, in partnership with the relevant State and Territory governments, industry stakeholders and consumer groups, to develop and agree a generic set of messages with a focus on creating awareness and confidence in smart metering.

**Box 45 Draft Policy Position 25 – Co-ordination of consumer engagement by Government**

25. The Commonwealth government and/or the state or territory governments should have a co-ordinating role in the consumer engagement program for the widespread installation of smart meters to enhance the understanding of the program by the community.

**Box 46 Consultation Question 7.3 - Role of government in non-mandated rollout**

7.3. What should be the co-ordinating role of government in a consumer engagement program in the absence of a mandated rollout?

### 7.3 Involvement of key parties

Irrespective of the role of government in the consumer engagement program, both industry and consumer groups also will need to be actively involved in providing information to consumers at all implementation stages.

#### 7.3.1 Industry involvement

For a rollout to be effective, distributors and retailers must be the primary information sources about the smart meter and associated services, including the technical details of the rollout and meter.

Distributors will be responsible for implementation planning, including the change-over arrangements of customers’ existing accumulation meters to smart meters. They are best placed to advise customers of the implications of the smart meters for deferred network augmentation, network management and emergencies and how the infrastructure will support customers’ access to and use of the consumption data.

Retailers must be critically involved to demonstrate to consumers how they can benefit from the new technologies and products, particularly in relation to the impacts on their bills. They also will have a key role in assisting consumers to access the relevant consumption information needed to inform consumer decisions.

There are a number of international examples of industry participation in smart meter communications plans, in some cases involving co-ordination with government.

**Box 47 Examples of International consumer education and engagement**

Canada
In Ontario, the Ministry of Energy along with Toronto Hydro developed brochures and letters which were sent out to all consumers with smart meters. These outlined basic information including: why the government mandated a smart meter rollout, how the new meters work and how they will help customers better manage their electricity usage. A key part of the strategy was access to detailed energy usage data.

**United Kingdom**

UK energy companies have invested significant time and resources into developing effective consumer engagement including the “Get Energy Fit” campaign run by EON, which associates energy efficiency with personal fitness. Other companies such as EDF have ensured that the benefits to consumers are real and tangible to increase engagement with consumers.

Ofgem, the UK regulator, has released a smart meter rollout strategy which encompasses consumer engagement and awareness proposals. The approach stresses coordination between suppliers, giving them the flexibility to define and deliver their own marketing campaigns, as well as a national awareness campaign run by an independent body, allowing a consistent smart metering message to be established.

**Italy**

In Italy, the utility Enel focussed on educating consumers about smart meter benefits from the beginning of their rollout. Their education campaign included holding town hall meetings and discussions with consumer protection groups. Enel focussed on explaining smart meter benefits and assuring customers that their bills would not go up as a result of smart meter installations.

**United States of America**

In California, PG&E initially received negative feedback about their minimal consumer education campaign, and basic concerns such as smart meters raising the cost of energy bills were common among consumers. Their updated consumer education strategy consists of notifying consumers in advance of meter upgrades through letters to the customer, education centres, a website and a 24 hour hotline.

### 7.3.2 Consumer and community involvement

Engagement with consumer and community groups at an early stage of the rollout strategy is essential. Consumer and community groups play a crucial role in disseminating information to many of the most vulnerable groups, including those on low incomes, those who have English as a second language, and those who may need help generally with their bills.

In ensuring a successful communication campaign, careful consideration needs to be given to how the information is presented to different audiences and the level of detail required. The information needs to be consistent and easily understood in order to minimise confusion and uncertainty. It is also likely to be necessary to consider a number of communication channels, including television, radio and print advertisements as well as printed and website information.

For vulnerable consumers, face to face interaction is often helpful and information sessions can be useful. More specifically a dedicated information and training plan to support community organisations in understanding smart meters and enabling them to provide consistent and accurate advice to their clients also will be needed.

**Box 48 Draft policy position 26 – Involvement of stakeholders in consumer engagement programs**

26. To develop relevant strategies for the consumer engagement program and to recommend the most appropriate strategies for different customer groups and circumstances, the involvement of industry and consumer representatives is essential.
7.4 Staged approach to consumer engagement

Three stages have been identified for consumer engagement:

- Prior to a rollout, where information preparing consumers and the community for the new meters should be provided.
- During a rollout, where more detailed and specific information outlining the functionality and benefits of smart meters should be provided. Information such as how to read the meter, methods for conserving and managing the household’s energy use (how they can modify their consumption behaviour) and how retailers and distributors may use the relevant smart meter functions would be useful.
- After the rollout, where retailers and distributors should keep customers updated and provided with the necessary information to decide what services they wish to have, including tariffs, TOU pricing and demand management products. The focus of the consumer education strategy should be on ensuring consumers understand and take advantage of their new smart meter functions and services.

Each of these stages will require a co-ordinated approach by all parties and consistent messages and information to be provided to consumers. It may be that the primary responsibility for ensuring this co-ordination is taken by the government at all stages, or it may be appropriate to be led by different parties, for example, industry participants.

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<td>7.4b. Does this responsibility change with a non-mandated rollout?</td>
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8 Customers’ Access to Data through the Home Area Network

One of the key benefits of smart meters to consumers is the capacity for them to receive considerably more information about their electricity consumption to enable informed decisions about their consumption and pricing. At present, consumers can request access to their consumption data. This information, which generally is aggregated data based on their quarterly bills, is made available either electronically or in written form. These requirements will remain in the NECF.

Smart meters, however, enable customers to monitor and receive information on their real-time or near real-time electricity consumption to make more immediate decisions and choices about their electricity use.

The meters include the capability to connect to a home area network (HAN), which supports the use of new services and tools including in-home displays (IHDs), “smart” appliances, managing the charging of electric vehicles, and connection to home computers. A HAN is just a communication network (wired or wireless) in the house which can carry instructions and information sent via the meter or the internet, including transmitting meter data to an IHD, computer or other device; transmitting switching commands to appliances from the meter or via the internet; and transmitting acknowledgements of commands received, actioned or failed.

An IHD is a device that displays information received via the HAN from the meter or internet about electricity use and price. The connection between the meter and an IHD, or devices that can be switched on or off by commands via that meter by the distributor or the retailer, is known as the “utility HAN”. The connection between a customer’s PC, smart phone or the internet and any devices that can be switched by commands from these sources is known as the “consumer HAN”.

The consumer will need to register the IHD on the meter, in order to receive data from the meter through the utility HAN. This might involve contacting the meter provider (often the distributor, but it may be the retailer), and receiving a security code to ensure the IHD is connected to the right meter and to protect the privacy of the data transmitted. Although IHDs do not have to be installed as part of a mandated smart meter roll out, it is expected that many households will choose to utilise IHDs to enable them to better manage their energy usage. Consumers may also wish to access their data through a web portal, smart phone or similar devices.

There are many issues related to the access of consumption data by consumers, including those arising from the installation of IHDs.

The policy positions discussed below would be implemented through future changes to the NER and NERR to support the use of the HAN and associated services.
8.1 Consideration of issues in Draft Policy Paper One

Draft Policy Paper One considered retailer marketing through IHDs and proposed that the energy marketing rules be extended to electricity distributors. The SCO Response confirmed this position and foreshadowed further consideration of marketing through IHDs in Draft Policy Paper Two.

8.2 Registering devices on the HAN

A device which displays a customer's electricity consumption must be registered on the meter before the meter will communicate with the device. This ensures that the device only receives signals from the customer's smart meter. It also gives the customer control over what devices are connected to the HAN.

Many of these devices may not be tied to a specific contract for the supply and sale of electricity. That is, a customer may buy an IHD or other such device from an appliance retailer, rather than just their own electricity retailer. Therefore, it is important that customers are able to register a device on the HAN interface without the device being part of an electricity retail contract.

Registering an IHD on the utility HAN can be essentially regarded as a request by customers for access to their data. This is because they are unable to access this data themselves electronically in any other way. The NERR require that customers explicitly request access to their data. To avoid any ambiguity in interpretation, it could be made clear that a customer's request for registration of their IHD on the HAN is also a request for access to their data.

In principle, it is considered that there should be no cost to customers in requesting this registration as it is simply a mechanism enabled through the HAN to access their data.

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**Box 50**  
Draft Policy Position 27 – Registering devices on the HAN

27. Customers will be able to register a device on the HAN without having to enter into a contract with any party.

**Box 51**  
Consultation Question 8.1 – registering the device in the HAN

8.1. Should such registration be provided at no direct cost to the customer?

**Box 52**  
Draft Policy Position 28 – Access implications of registration

28. Registering an IHD device or other device capable of receiving and displaying metering data and logging on to a web portal provided constitutes a request for access to metering data.
8.3 Customer costs to access data through the HAN

The NERR requires that metering data is confidential. Access to the metering data is also limited to authorised persons, with customers able to access metering data associated with their metering installation on request and free of charge under certain circumstances. These arrangements will continue in the national framework.

As a key benefit of smart meters for customers is their capacity to receive and respond to information to in order to manage their consumption, an important policy outcome is to enable customers to access their information in a way which is easy, cheap and in a convenient format. This policy position is consistent with how the market operates now.

Therefore, any cost to consumers to access to their meter data through the HAN or a web portal is likely to discourage consumers from seeking this information, potentially reducing their capacity to respond to consumption and pricing signals.

Box 53 Consultation question 8.2 – Customers’ access to data

8.2. Should customers be able to access their own data via an IHD, web portal or similar devices free of charge?

8.4 Access to data by third parties

The NECF requires a retailer to provide a small customer with historical billing data for the previous 2 years at no cost on request.

However, not all consumers have the time or capacity to interpret their consumption information so that they can make decisions about how they use electricity or whether another retailer’s offer would be better for them. Therefore, an important principle is that consumers should be able to authorise provision of their data to any authorised third party who can help inform their decision. This data could be made available through a secure HAN device or directly from a service provider’s system.

This may enable a variety of parties to offer bill comparison or home energy management services, and is an important component in promoting competition and realising benefits for consumers.

New products such as critical peak pricing tariffs or rebates may offer an opportunity for energy market intermediaries to assist consumers by ensuring that they have a contractual arrangement that suits their preferences.

The principle is generally accepted that customers have the right to give their data to a third party or to decide that their data can be accessed by a third party. However, there may be barriers to the latter occurring effectively. Enabling access to a customer’s data would require distributors, retailers and perhaps metering service providers to be sufficiently prepared to enable a third party to assist their consumers in this way, and reassurance that this is consistent with the legal framework. It may require regulatory change to require such supply of data where the consumer asks for it to occur.
8.5 **Messaging through the IHD**

An IHD is effectively a communications platform linking directly into homes. As such it is likely to be an attractive medium for those wishing to send messages to consumers, including retailers, distributors and third parties. As with any direct communications to consumers, this raises the issue of who can use the medium for this purpose and whether consumers have the right to reject such messaging.

Retailers and distributors may have direct business reasons to send messages to the IHD, such as emergency updates, planned outages, alerts on tariff changes, or critical peak pricing (CPP) events.

They may also wish to send other content, including marketing material generated by their business or provided by third parties. In marketing to consumers, these parties may wish to use information provided by the meter to better target products, in much the same way as many search engines and social media sites. In the case where the IHD is included as part of the tariff offer, retailers may offer a discount on the product or provide it at no cost if the customer agrees to receive marketing material through the device.

It is considered important that content shown on the IHD does not interfere with its main purpose, that is, to allow consumers to monitor their electricity use and cost in real time. Nevertheless, it is also recognised that the IHD provides a good opportunity for information to be transmitted to customers in a timely and effective way.

There are two key questions arising from consideration of messaging through the IHD:

1. Should there be any restrictions to distributors, retailers and third parties sending messages to customers through the IHD?

2. Should customers have a right to prevent any messages being sent to them through the IHD?

The registration of the IHD is specific to the customer. It will receive personal information generated by the customer of the electricity distributor and retailer through the utility HAN. In EMRWG’s view, therefore, the use of the IHD to transmit messages should be viewed in the same way as any other mechanism whereby industry participants collect and use information about their customers. While it is a sophisticated device which the distributor and/or retailer could use to send messages to their customers, it could also simply be seen as an alternative
to existing mechanisms used by those parties to communicate with their customers. That is, communication through the IHD should be viewed in the same way as a letter, other written notification, telephone call or SMS message through a mobile phone.

In this context, these parties would be governed by the National Privacy Principles (NPPs) in regard to the collection, use and disclosure of personal information. The NPPs in this situation are clear. Personal information collected from an electricity customer and used for its primary purpose, that is, the supply and sale of electricity, can be used for another or secondary purpose if it can be reasonably expected by the customer that the information would be used for that purpose. A customer does not have to give consent for the information to be used for that purpose.

SCO considers that, as in current circumstances, it can be reasonably expected that customers could receive the following information from their suppliers through the IHD:
• From distributors, information on imminent power emergencies (for example, bushfires) and planned outages and restoration of supply in accordance with the regulatory requirements.
• From retailers, information related to their sale contract including pending price increases and significant changes to their contract terms, in accordance with the regulatory requirements.

However, EMRWG also acknowledges that this is a developing area of technology and it may be that there are risks to customers receiving the information in this way, particularly retail contract information on price increases or material changes to the terms of their contracts. This information is required to be sent now within certain timeframes and in accordance with the NERR and should be sent to customers in writing. It may be appropriate for customers for a transitional period to provide consent to receive such information through an IHD.

In any circumstances, and following current practice, EMRWG does not consider that it is reasonable to assume that consumers would expect marketing or similar information to be sent through the IHD by the distributor or retailer without explicit informed consent to receive the information in the first instance. Nor does it consider that third parties have any rights to use the IHD to send any messages to consumers without such consent.

This consent could either be gained at the time the customer enters the electricity sale contract with their retailer or during the retail contract period. Distributors and third parties would need to establish other mechanisms for obtaining this consent.

In accordance with the NERR, retailers and distributors would need to maintain a record of customers who have chosen to receive messages from any party through the IHD, and of those who have opted out of receiving messages. A record of all content sent to the IHD would also be expected to be kept, consistent with the NERR.

8.6 Disconnection notices and the HAN

The issue of whether disconnection notices can be issued to a small consumer through the HAN or IHD has been raised. The NERL provides that notices can be issued to a small customer in a range of ways, including by sending it electronically, but only if the small
customer has given explicit informed consent to receiving the notice or other document electronically.

A disconnection warning notice is required to contain a range of particulars in terms of content. It is important to note that the NERR places stringent requirements on a retailer before it can disconnect a small customer for failure to pay a bill. If a small customer has not paid a bill by the due date, the retailer must:

- issue a reminder notice
- issue a disconnection warning notice; and
- after giving the disconnection warning notice, the retailer must use its best endeavours to contact the customer in connection with the failure to pay. Contact for this purpose can be in one of the following ways:
  - In person
  - By telephone (if the telephone is unanswered the contact is only taken to have occurred if the customer acknowledges receipt of a message)
  - By facsimile or other electronic means (the contact is only taken to have occurred if the customer acknowledges receipt of a message).

The retailer can disconnect the customer only after it has complied with these steps and the customer refuses or fails to take any reasonable action towards settling the debt.

While the NERL and NERR do not expressly refer to smart meters, there is no reason to believe that these requirements should not apply to electronic communication via an IHD. Accordingly, a disconnection warning notice could be issued to a small customer electronically via an IHD, where the small customer had provided their explicitly informed consent. However, given the content requirements for these notices, the IHD would need to have the technical capacity to provide the necessary particulars for the notice, and the consumer would have had to have given explicit informed consent to receiving the notice electronically. In addition, the consumer must acknowledge receipt of the message – which may not be possible with many IHDs currently on the market.

All of these requirements make it unlikely that an IHD would be used to issue a disconnection warning notice.

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**Box 56 Draft Policy Position 30 31 and 32 – Messaging through the IHD**

30. Distributors can send messages on imminent power emergencies and planned interruptions, in accordance with the regulatory requirements, to customers through their IHD without consent.

31. The retailer, distributor or any third party cannot send marketing or similar information to customers through the IHD without customers’ explicit informed consent to receive the information.

32. For retailers, this consent can be obtained at the entry to the contract or during the contract period. Distributors and third parties must have clear mechanisms whereby this consent is obtained. All parties must be able to provide clear evidence of this informed consent.
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<tr>
<th>Box 57</th>
<th>Consultation Questions 8.4 – Messaging through the IHD</th>
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<tbody>
<tr>
<td>8.4a.</td>
<td>Is it reasonable to assume that the retailer could send information on pending price increases and other changes to contractual terms through the IHD without a customer’s consent?</td>
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<tr>
<td>8.4b.</td>
<td>If not, should the retailer obtain the prior explicit informed consent of the customers to use this medium for transmitting such information?</td>
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9 Privacy Considerations

The introduction of services and applications enabled by smart meters will result in increased opportunity for customer participation with their electricity use, but will also result in increased data flows.

EMRWG intends to assess these data flows at a systemic level in a separate piece of work to this review of consumer protections. EMRWG is aware that the Victorian Government has commissioned a Privacy Impact Assessment (PIA) to understand the issues and privacy risks arising with the access to and the collection, use and disclosure of information in a smart meter environment. This PIA was released on 14 December 2011. The outcomes will inform the broader Privacy Impact Assessment (Assessment) to be undertaken for the national framework.

Some matters have already been identified in section 8 in relation to the marketing of information through IHDs and adherence to the National Privacy Principles (NPPs) issued by the Federal Privacy Commissioner. Based on the NPPs, the Assessment will be adapted and extended to further high-level requirements of the National Smart Metering Program.

The Assessment will advise on how best to balance the accommodation of market and technological innovation with protecting the privacy of customers. It will consider possibilities that enhance customers’ access to their energy usage data as well as relevant risk mitigation strategies. The final product is intended to include proposals for enhanced data access, mapping of data flows, legal assessment and a gap analysis. Stakeholders and interested parties will be consulted as the Assessment is developed.
10 Independent Dispute Resolution for Customers

A key customer protection for all small electricity customers is the capacity to easily access an independent dispute resolution scheme if they cannot resolve their complaints with their distributor or retailer. Each jurisdiction has an independent dispute resolution scheme available at no cost to small customers and each retailer and distributor currently is required under licence to be a member in each jurisdiction in which they operate. The obligation will continue under NECF. Most schemes are industry-funded.

EMRWG recognises that the introduction of smart meters may cause an increase in the nature and extent of complaints as customers are exposed to new metering issues despite the customer protections that are in place. Industry participants may also take some time to understand and resolve these issues. Nevertheless, EMRWG also expects that most of the complaints will be associated with billing, de-energisation (disconnection), customer transfers and customer service issues, including reliability of supply. These are all matters familiar to distributors and retailers and they should ensure that their call centres and complaints-handling procedures are equipped to manage these issues in a smart meter environment.

These are also matters that the jurisdictional Energy Ombudsman currently handles. There may be a spike in the complaints to the Ombudsman with the introduction of smart meters, and it will be incumbent on the distributors and retailers to work with the Ombudsman to improve the effectiveness of their complaints handling. Industry participants will have an incentive to do so, to reduce the costs of the scheme to the individual participant and the industry as a whole.

As with the current market arrangements, however, an Energy Ombudsman does not have the powers to investigate complaints about third parties who may be independently providing services in the electricity market. The Energy Ombudsman may only investigate complaints regarding member companies, and third party companies offering appliance control services, such as DLC, are not currently members of the Energy Ombudsman schemes. This could lead to a situation where complaints about the same service are investigated by different agencies, depending on the party providing the services, or not addressed at all.

EMRWG notes that this situation already exists within the electricity market. Some marketing complaints can be investigated by the Energy Ombudsman because they directly relate to the scheme members, but other marketing complaints may be related to independent third parties. These parties can only be investigated by the jurisdictional consumer affairs agency or the Australian Competition and Consumer Commission (ACCC) if appropriate.

Notwithstanding, EMRWG is concerned that the effective introduction of new products to assist customers to benefit from smart meters, such as DLC, may be negatively impacted if there are not consistent and clear independent dispute resolution mechanisms available for all participants in the market. The NECF provides for the Energy Ombudsman to be empowered to investigate any matter arising under or in connection with the NECF, consistent with the powers and functions in the instruments creating the Energy Ombudsman. Each jurisdiction has the flexibility to determine powers of the Energy Ombudsman, and to
decide how relevant complaints should be handled in that jurisdiction. This occurs in different jurisdictions already.

Depending on the rules which may ultimately apply to the offering of other products and services in the competitive electricity market, there may be sound reasons for ensuring that all independent disputes about these products are placed under the jurisdiction of the Energy Ombudsman. This would ensure that customers’ complaints are not passed from one agency to another to resolve the dispute. It would also enable some consistency to be provided in complaint handling and any systemic issues which may impact the effectiveness of the smart meter rollout, and consequently the benefits to customers, to be identified and addressed by the relevant body.

However, this would require third parties who wish to offer such products, including DLC through the HAN services, to become members of the relevant Energy Ombudsman scheme. This would have significant implications for the schemes, including cost allocation and scheme participation. Depending on how the costs and scheme entry are structured, it could also act as a barrier to third parties’ participation in offering these products to customers in the market.

The broad principle that EMRWG wants to achieve is consistency for customers, at least in a transitional period, in the resolution of their independent disputes about these matters.

### Box 59 Consultation Questions 10.1 and 10.2 – Third party entry to Ombudsman schemes

10.1. Should any party offering products such as DLC through the HAN be required to become members of the relevant Energy Ombudsman scheme?

10.2. What are the implications and risks of this approach?
PART C – TECHNICAL AND SAFETY ISSUES

Technical and safety matters in the electricity sector are well regulated. Distribution businesses are subject to both jurisdictional and national technical regulations, some of which are contained in the NECF. All jurisdictions have safety regulators, all of whom will continue to perform their functions in concert with the national regulators.

The widespread installation of smart meters, because of the large number of consumers who will be impacted within a concentrated period of time, will bring to greater public attention some technical and safety issues associated with electricity meters. As a greater proportion of accumulation meters in domestic premises are replaced by smart meters, there is likely to be greater scrutiny of the condition of electrical wiring in homes by the distributors. As well, the remote energisation and re-energisation of customers’ properties has provided some new technical challenges, and the recognition that customers will require more information in this area.

Chapter 11 and Chapter 13 address these issues, with particular focus to ensure that low income and vulnerable consumers continue to receive adequate protections in the electricity marketplace.

Some members of the community have expressed concerns that the installation of meters may increase their exposure to radiofrequency emissions. Chapter 12 provides background into how this issue is currently addressed and how the concerns of the community can be ameliorated.

Finally, this Part considers whether the smart meter minimum functional specification should be amended to facilitate small scale embedded generation.
11 Metering Installations and Customer Impacts

The installation of new, and replacement of older, accumulation meters historically has caused little disruption to most consumers or distributors. The usual problems experienced by consumers have been delays in installation or minor damage to property by the distribution businesses. Most distribution businesses have dealt with customer complaints on these matters satisfactorily and customers always have redress to the independent Energy Ombudsman if this is not the case.

For the distribution businesses, the situations which may prevent the straightforward installation of a replacement electricity meters include:

• insufficient space at the meter installation site (for example, meter board, meter enclosure);
• inability to access the meter box to undertake the replacement;
• the presence of non-compliant or hazardous materials (e.g. asbestos);
• dangerous wiring; and
• other technical non-compliance at the customer’s premises.

These are likely to be the same situations which arise for consumers in the widespread installation of smart meters. However, there may be an increased incidence of technical issues for the distributors and a higher profile of consumer concerns simply because of the numbers which will be installed in a relatively short period of time, and the communications infrastructure required to support the smart meters.

Some customers, particularly those in older homes, have encountered more serious problems when their accumulation meter has been replaced. The wiring in these homes has been found to be unsatisfactory and electrical repairs must be undertaken at the customer’s expense prior to the meter being installed. In the most serious cases, the electricity supply is disconnected until the rewiring work is completed.

Notwithstanding the severity of the impacts, EMRWG understands that, to date, the proportion of consumers affected at any one time is low and the consumers are spread across a large network area or the state. If customers in financial difficulty are found to be in this situation, they are sometimes assisted to be reconnected through a range of measures contributed to by the distribution business, welfare agencies or government assistance programs.

11.1 Unsafe wiring issues

This issue is of most relevance where governments have mandated deployment of smart meters. EMRWG acknowledges that some stakeholders and consumers reject the notion that any customers should pay any costs for wiring or other technical reasons just so a smart meter can be installed in their premises. Nevertheless, EMRWG also considers that consideration must be given to the fact that the installation of these meters may result in
existing unsafe situations being identified and rectified so that later and potentially serious consequences are avoided for the household.

It is understood that the distribution businesses will only take the step of requiring customers to undertake wiring repairs at their homes when there is a serious problem with their existing wiring. For those customers, this identification is likely to lead to the avoidance of future electrical problems in their homes, including fires.

EMRWG’s key concern is that some customers in financial difficulties or hardship may be faced with additional costs associated with unsafe wiring in their homes at the time that a smart meter is installed. While the identification of these electrical problems is important, it is also important that these customers do not face additional hardship because of the repair costs associated with replacing their old meter.

### 11.2 Possible policy responses

EMRWG notes that under current jurisdictional arrangements, the homeowner is financially responsible for the rectification of unsafe electrical wiring situations. However, it is seeking to balance this obligation against its concerns that the imposition of additional and unexpected costs on consumers due to the installation of smart meters has the potential to cause, or exacerbate, hardship for low income households.

Stakeholders have noted that there are a number of mechanisms whereby low income customers could be assisted to offset any additional costs incurred. Currently, all jurisdictions provide concessions or rebates for low-income households to assist with their electricity charges and it may be that these jurisdictions could give consideration to extending the provision of concessions for the costs of electrical rectifications, noting that the incidence is likely to be very low.

Alternatively, in circumstances where the provision of smart meters is a distributor-led program, it may be that the responsibility should lie with the distributor to provide assistance to the customer. Or, as retailers are required to assist customers in financial difficulties and hardship, it may be that arrangements should be agreed between the distributor and the retailer to work together to assist those customers in hardship.

EMRWG is concerned to ensure that any policy response is taken with sufficient information to understand the extent of the problem. Consequently it considers that a greater understanding of the number of customers who may be in this situation is required prior to a final policy approach being proposed. Therefore, it may be that the appropriate program response to assisting low income customers in these circumstances is taken by each jurisdiction at the time that the smart meter rollout occurs in that jurisdiction.

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**Box 60 Draft Policy Positions 33 34 –Metering installations and customer impacts**

33. Low income households should not be placed in additional or unexpected financial hardship as a result of the need for electrical repairs being identified during the installation of a smart meter at their premises.

34. Jurisdictions should be responsible for determining how to assist low income customers in these circumstances, depending on the nature of their rollout.
12 Radiofrequency Emissions and Smart Meters

Smart meters use low-powered wireless technology to communicate to a nearby data collection point(s), from which the signal is relayed to the distributors’ back-office systems. Smart meters usually incorporate a separate low power transmitter designed to communicate with “smart” electrical devices or appliances around the home (such as in-home displays, computer dongles and air-conditioners).

The technology employed by smart meters is similar to other radio-transmitting devices, such as cordless phones or mobile phones. However, unlike those devices, people do not typically spend extended periods very close to their electricity meter where the electromagnetic field strength is highest. As smart meters transmit intermittently, from outside the home and for extremely short periods (milliseconds), their average field strength is lower than other common radio devices over time.

12.1 Consideration of the issue

Nevertheless, EMRWG is aware that some consumers have raised concerns about the long-term effects on human health of the radiofrequency (RF) emissions of smart meters. Others hold the view that a precautionary approach should be taken while there is any uncertainty about the impact of RF emissions on human health. That is, smart meters should not be installed at all until there is certainty that there are no negative health impacts.

For other consumers, it is the mandatory nature of a rollout, which raises concerns. Unlike choosing to use a mobile or cordless phone, they may not be given a choice to have a smart meter installed. Therefore, they are unable to make their own decision about how to treat the potential health risks.

Concerns about the effect of RF emissions on human health are not specific to smart meters, and are continually monitored by health agencies worldwide, including the World Health Organisation.21

The Australian Communications and Media Authority (ACMA) is responsible for the development of mandatory standards regulating the performance of particular radio communications transmitting devices to protect the health and safety of persons exposed to electromagnetic radiation from the transmitters (the Exposure Standard)22. This standard is based on the exposure limits published by the Australian Radiation Protection and Nuclear Safety Agency (the ARPANSA Standard).23 Compliance with these standards is primarily the responsibility of ACMA. ARPANSA has recently published a series of fact sheets on

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radiofrequency emissions and smart meters. These are available from the ARPANSA website\textsuperscript{24}.

The Victorian Government has commissioned an independent consultant to measure and report on the electromagnetic emissions from smart meters in order to allay community concerns about potential health risks. This study was released on 14 December 2011. Preliminary testing indicates that the communications technology currently installed in Victorian smart meters complies with the exposure limits published by ARPANSA and have weaker electromagnetic emissions than other sources, such as baby monitors and mobile phones.

\subsection*{12.2 Possible policy responses}

EMRWG is aware that, similar to consumer concerns about radiofrequency emissions from mobile phones and other wireless devices, some consumers will apparently experience effects while many others will not. These issues must necessarily be addressed on a case-by-case basis. In this respect, EMRWG considers it important for the distribution businesses to be transparent and proactive in providing information to their customers.

Nevertheless, based on the information to date, there are some actions that EMRWG could take now to develop a national approach to allay consumer concerns. These include ensuring that consumers are aware that all smart meters installed by distribution businesses comply with the applicable Australian Standards. If necessary, these Standards could be supplemented by a Code of Practice governing the installation of such meters.

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Box 61 Draft Policy Position 35 – Radiofrequency emissions and smart meters \\
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35. Customers must be informed about the standards which apply to radiofrequency emissions in respect to smart meters, the obligations on distribution businesses to comply with these standards, the outcomes of any relevant trials, and the compliance monitoring role of ACMA. \\
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Box 62 Consultation Question 12.1 - Radiofrequency emissions and smart meters \\
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12.1. Who should be responsible for communicating information to customers? What role should the distribution businesses take? \\
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\textsuperscript{24} www.arpansa.gov.au
13 Remote Energisation/Re-energisation and Customer Safety

Energisation or re-energisation of supply to customers’ premises can occur under a number of circumstances. Customers moving into new premises must have those premises energised to enable access to supply. Some customers may have had their existing premises de-energised for a number of reasons, including as a last resort for non-payment of accounts, and then require the premises to be re-energised when the situation has been rectified.

Currently, energisation or re-energisation of customer premises requires the attendance of the distributor’s field staff to physically restore supply. This is typically done by inserting service fuses which are not accessible to customers. It is noted that the equivalent of de-energisation and re-energisation of premises without attendance of field staff does occur when power is restored following widespread power outages.

The ability to energise and re-energise a customer from the electricity network without the need for a visit from field staff is one of the key features of smart meter operation. This feature can facilitate cost savings by avoiding the requirement for a site visit, and allowing a much more rapid response to customer requests. Consequently, it is a function which is important to benefits being realised in the effective implementation of a widespread rollout of smart meters.

When power is restored to a site remotely, two possible safety issues may arise:

- Where appliances are left switched on, and begin operation upon re-energisation, there is the remote possibility of unexpected damage. Most seriously, some appliances such as heaters and stoves may cause a fire if they begin to operate (where it was assumed that the supply would be off) when the premises are unattended, or without prior inspection by the customer.
- If power is restored while electrical work on the premises is being undertaken an unsafe situation is created.

Obviously, these potential safety hazards must be minimised. This section examines both the procedural and physical protections which could be implemented in order to avoid these hazards arising. It also raises some possible policy responses for addressing the customer implications which arise from these procedures.

13.1 Consideration of issues in Draft Policy Paper One

Draft Policy Paper One examined the procedures that would be in place under the NECF prior to customers being de-energised from supply and confirmed that the same consumer protections would apply to customers with smart meters. This includes the procedures for re-energisation.

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25 Many consumers will use the term connection and disconnection
The safety issues arising from this re-energisation, and energisation of premises, have been brought to EMRWG’s attention since publishing this initial policy paper.

### 13.2 Benefits of remote energisation/re-energisation

The value of the benefits from remote energisation and re-energisation has been estimated in various Cost-Benefit Analysis (CBA) exercises which have been undertaken around smart metering in Australia to date.

These include:

- The national Smart Metering Program 2008 Phase 2 CBA for electricity networks, undertaken by CRA International, which observed that the cost per visit for staff to undertake manual energisation, de-energisation or re-energisation varied from $20 to $145. With smart meters, the total value of avoided costs for the whole of Australia was estimated to range from $26.3M to $36.8M per annum.

- The 2010 CBA for the Victorian Advanced Metering Infrastructure program, undertaken by Oakley Greenwood concluded that the avoided cost of manual de- and re-energisation (and avoided revenue loss) over 20 years would be $364M.

These cost savings for the distribution businesses, achieved through the operation of smart meters, should ultimately be passed on as benefits to consumers through lower network charges for these services.

Discussions with industry stakeholders suggest that current practice is for retailers to avoid de-energising properties after occupants have vacated, as the cost of any small amount of electricity consumption in the period between move-out and move-in would be lower than the cost of a visit of field staff, to de-energise the property. With the availability of the remote functions, de-energisation and subsequent energisation on move-out and move-in would most likely become standard practice.

The overall value to consumers of being able to have power restored to their premises, without the need for field staff to visit, has been quantitatively estimated in the cost benefits analyses that have been undertaken for the deployment of smart meters. There is a further benefit of remote energisation that has not been quantified which is the timeliness of the response to customers’ requests for re-energisation. Although difficult to quantify, this benefit would also include the higher level of satisfaction experienced by the customer with the utility’s response.

### 13.3 Functional capability

The Minimum Functionality Specification for Smart Metering Infrastructure (Version 1.2) requires that smart meters have a supply contactor which is the electrically controlled switch within the smart meter that enables the supply to be turned off or turned on and has remote operation capabilities. To deal with any safety issues the supply contactor can be operated to re-energise supply in three ways: turn on, arm and monitor supply. When the supply is to be energised, the meter receives a command to switch on, arm or switch on and monitor supply.

These available commands are intended to provide a safe switch-on capability that would meet the technical needs of the energisation and re-energisation functions in all jurisdictions.
Switch on command

This command directly energises the premises.

Arm command

If the smart meter receives an arm command directed to it from the distributor or retailer, the meter ensures that there is power coming from the electricity grid to the supply contactor and the supply contactor is in the open position. The meter has a clearly visible indication that the supply contactor is now in the armed state.

When the meter is in this armed state, the customer can change the meter from the armed state to the on state (supply contactor in the closed position) by pressing a button on the meter (it may be that the main switch will need to be turned on by the customer as well). That is, power can be brought to the meter without being sent into the house, allowing the home owner to check that turning the power on to the house will not present any safety hazards.

Switch on and monitor command

If the meter receives a command to close the switch and monitor supply, it immediately connects power into the house and monitors the amount of power being drawn. If it detects power above a certain limit, it immediately switches off again in a time frame short enough to prevent a potential unsafe situation.

13.4 Implications for customer action and safety

The smart meter functionality, therefore, enables remote energisation or re-energisation of customers’ premises to be undertaken safely with or without customers’ active participation. Subject to, requirements of safety regulation in the jurisdiction, retailers and distributors may choose either the arm function, which directly involves the customer, or the monitor supply function, which may involve the customer.

Distributors may use the arm function, with customers completing the energisation of their premises at a convenient time. The customer being present mitigates any safety risk of the premises being energised.

From a safety perspective, energisation of a premises using the arm command is little different from the current approach where a field visit to insert the fuse is followed by the customer turning on the main switch. This approach has been used without safety issues arising.

Retailers or distributors may use the monitor supply function and will receive feedback on the success or failure of the command. If the command fails (the switch has opened after its initial closure) because the meter has detected that there is too much power being consumed in the premises and therefore will not re-energise, the customer can be contacted to turn appliances off or turn off the main switch.

There are a number of policy issues arising from these implications which are discussed below.
13.5 Possible policy responses

13.5.1 Endorsement of remote energisation and re-energisation

There is a view that if new smart meter procedures are not properly implemented, despite the benefits of remote energisation, the safety implications are sufficiently serious to continue the existing practice of ensuring field staff on each occasion.

The attendance of field staff could be beneficial to safety in that the customer's switchboard may be inspected before energisation occurs, which may identify further safety risks. However, field staff in these circumstances still would not normally enter the customer's premises. Therefore the problem of appliances being connected left turned on and being a potential safety hazard on re-energisation would not be dealt with.

Customers are already able to undertake some limited actions at the electrical utility board of their premises. These include operating the main isolator of their premises, as well as operating isolators, circuit breakers and safety switches and replacing fuses on individual circuits.

Current regulations in Queensland and South Australia require that field staff be present when a premises is re-energised. In other jurisdictions, the practice depends on local codes and regulations. To facilitate remote energisation as standard practice nationally, jurisdictions will need to amend legislation, regulation and codes of practice. This could be complicated by the fact that the Minister and government agency responsible for electrical safety regulation varies between jurisdictions. In some cases, it will be the occupational safety regulator rather than the energy regulator.

Nevertheless, EMRWG considers that the benefits attributed to remote energisation, and the agreement to the national Minimum Functional Specification, support a national approach.

Box 63 Draft Policy Position 36 37 38 - Remote energisation and re-energisation

36. Remote energisation and re-energisation should become the standard practice across all jurisdictions.

37. Remote re-energisation could be carried out using the Arm or Monitor Supply functions of smart meters, depending on the jurisdictional decisions.

38. Jurisdictions should amend legislation, regulations and codes of practice as necessary to facilitate the implementation of remote energisation and re-energisation as standard practice for smart meters.

13.5.2 Customer information and actions

The implications for customers’ understanding and knowledge in a remote energisation and re-energisation environment are significant. Consequently, customer information and assistance are crucial. There will be a range of information requirements: – knowledge of how the smart meter works for these functions and the arm function and switches; how to recognise when action needs to be taken; and the importance of ensuring appliances are disconnected from the power source prior to energisation or re-energisation.
As noted above, remote energisation can be carried out as safely as it is currently if appropriate procedures are adhered to by distributors and retailers and that customers understand their role in the process.

At the least, EMRWG considers that customers must be advised that the energisation or re-energisation is to be performed remotely and given guidance on how to avoid any electrical safety risks associated with this action. Further, if the distributors or retailers are not assured that it is safe to do so, then the remote energisation or re-energisation must not occur.

Nevertheless, this still raises questions as to how this guidance will be provided and how retailers and distributors will be able to satisfy themselves that the remote energisation or re-energisation can be undertaken safely.

**Box 64 Draft Policy Position 39 40 - Customer information**

39. Guidance must be provided to customers to assist them to undertake the relevant safety checks in their premises before remote energisation or re-energisation is undertaken.

40. Retailers and distributors must not remotely energise or re-energise if they are not assured it is safe to do so.

**Box 65 Consultation Question 13.1 – Customer information**

13.1. What are the options for providing guidance to customers on their obligations regarding remote energisation and re-energisation of electricity supply?

**13.5.3 Customer choice**

Notwithstanding the above, and noting that information will be provided to all customers in these situations, it may also be possible for customers to choose to have their premises manually energised or re-energised, at an additional cost. While EMRWG would want to minimise these situations, this may be necessary for customers who are not confident about undertaking actions at their utility switchboard.

While this may be an option for some customers requesting energisation or re-energisation, EMRWG recognises that this may not be appropriate in some cases, for example, for elderly customers or those with disabilities.

An alternative for these customers would be to use the on command to close the supply contactor or the switch on and monitor supply. If these approaches were used there would still be some obligations on the customers to ensure that the premises were safe to energise or re-energise.

The requirement to pay an additional charge for manual re-energisation may need to be waived. In these cases, the existing energy concessions arrangements could be extended to include the payment of the manual re-energisation charge for qualifying groups of customers. In circumstances where it is a distributor-led smart meter rollout, it may be that the distributor is required to meet the costs of manual energisation or re-energisation; alternatively the distributor or the retailer could consider options for those customers in hardship or vulnerable customers.
Box 66  Draft Policy Position 41 42– Customer choice

41. Customers may be offered the option of a manual energisation or re-energisation, which may be on a cost-recovery basis.

42. Jurisdictions should make provisions to assist disadvantaged groups of customers for whom remote energisation or re-energisation is not appropriate.

Box 67  Consultation Questions 13.2 – Customer choice

13.2. What are the implications for these customer’s premises being energised or re-energised using the on command or the switch on and monitor supply command?

13.5.4  Customer Access to Meters

There are many situations where customers cannot easily gain access to their electricity meter. This is most common in multi-dwelling developments, such as apartment blocks and town houses. In these situations, each dwelling would have an accessible sub-board, with circuit breakers or fuses, main switch and safety switch.

The lack of ready access to the meter prevents the convenient use of the Arm function. In these situations, the Monitor Supply command, subject to the safety regulation, may need to be implemented.

Retailers or distributors could use the on command to energise or re-energise the premises provided the customer is on site when this form of remote energisation takes place to ensure that the premises are safe by turning off their appliances. Procedures would be required to ensure that this method cannot be applied unless the customer is at the premises. That being the case, the situation is no less safe than the customer turning on the main switch after the service fuse has been inserted.

Additional safety guidelines will be required to assist customers to how to isolate their premises with the accessible main switch, which would be closed once the safety check is completed.

Box 68  Draft Policy Position 43 – Customer access to meter

43. Electricity retailers and/or DNSPs must develop procedures for the remote energisation or re-energisation of premises where customers do not have convenient access to their meter.

Box 69  Consultation Questions 13.3– Customer access to meter

13.3a. When an energisation request is made by a customer, should distributors and retailers ensure that the safety risks are mitigated by asking the customer to ensure that the main switch is turned off?

13.3b. What additional requirements are necessary when customers with smart meters make a request for an energisation that remote energisation is carried out safely?
13.5.5 Worker health and safety

All jurisdictions require that electrical wiring be only undertaken by qualified people. It is a well-established safety practice for electrical tradespersons that premises or individual electrical circuits are isolated before any work is commenced. While the practice of isolation should be undertaken for all electrical work, it is possible that this may be overlooked when the premises are remotely de-energised.

<table>
<thead>
<tr>
<th>Box 70</th>
<th>Draft Policy Position 44 45 – Worker health and safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>44. Training and communication for electrical tradespeople should be promoted to raise awareness of the possibility of remote re-energisation when electrical work is undertaken.</td>
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<tr>
<td>45. Codes of practice, guidelines and other documentation relevant to the electrical trades should be amended to recognise the possibility of remote re-energisation.</td>
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</tbody>
</table>
14 National minimum functionality and embedded generation

Embedded generation, such as solar PV, is becoming more common in residential areas. With rising electricity prices, some consumers may be more inclined to consider installing embedded generation (regardless of any subsidies that may be available). A meter that supports the use of embedded generation will reduce the transactional costs involved in installing embedded generation.

The key issue for embedded generation is the capability of the meter to measure bidirectional flows of energy. The national minimum functionality of the smart meter requires that the meter is capable of measuring, recording and storing bidirectional flows. The meter will also indicate whether energy is being imported from or exported to the grid.

Net metering of embedded generation using a single element meter is the minimum requirement under the national minimum functionality, but this does not preclude the installation of dual element meters for gross metering where appropriate. It is up to the distributor to choose the most appropriate metering configuration for their customers and network needs. It is expected that the smart meter configuration will largely replicate the existing metering arrangements at customer premises.

For premises with existing embedded generation, current metering arrangements should be replicated, while metering arrangements should be considered for embedded generation installed in a post rollout situation. Metering arrangements need to meet any relevant jurisdictional requirements for the metering of embedded generation including the appropriate arrangements to support any applicable feed-in tariff.

Box 71 Consultation Question 14.1 – National minimum functionality for embedded generation

14.1. Are there any areas in which the minimum functionality may inhibit the use of embedded generation?
## Ministerial Council on Energy – Objectives for a National Smart Meter Rollout

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reducing demand for peak power, with consequential infrastructure savings (e.g. network augmentation and generation)</td>
<td>2. Driving efficiency and innovation in electricity business operations, including improving price signals for efficient investment and contracting.</td>
</tr>
<tr>
<td>3. Promoting the long term interests of electricity consumers with regard to the price, quality, security and reliability of electricity.</td>
<td>4. Promoting competition in electricity retail markets</td>
</tr>
<tr>
<td>5. Enabling consumers (including residential, business, low- and high-volume users) to make informed choices and better manage their energy use and greenhouse gas emissions</td>
<td>6. Manage distributional price impacts for vulnerable consumers</td>
</tr>
<tr>
<td>7. Promoting energy efficiency and greenhouse benefits</td>
<td>8. Providing a potential platform for other demand side response measures and avoiding discrimination against technologies, including alternative energy technologies</td>
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## B Policy Issues Addressed in Policy Paper One and Draft Policy Paper Two

### Table 1 Smart meter policy issues

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<th>New issue in PP2</th>
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<td>Concession frameworks</td>
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<td>Distributional impacts of TOU tariffs</td>
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<td>Reconciliation of bill charges with smart meter reading</td>
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<td>Overcharging and undercharging</td>
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<td>Displaying Estimations on the bill</td>
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<tr>
<td>Presentation of consumption information</td>
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<td>Access to historical metering data</td>
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<td>Direct Load control services</td>
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<td>Supply capacity control services</td>
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<td>Distributor marketing</td>
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<td>Marketing through the IHD</td>
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<td>Notification of remote disconnection</td>
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<td>Use of Prepayment metering</td>
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<td>Disconnection of premises with embedded generation installed</td>
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<td>Relationship of network and retail tariffs</td>
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<td>Community service obligations</td>
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<td>Access to dedicated off peak tariffs</td>
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<td>Use of Local time when applying time based tariffs</td>
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<td>Appropriateness of Estimations methodology for time based tariffs</td>
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<tr>
<td>Smart meter functionality supporting embedded generation</td>
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<td>Data access, security and privacy</td>
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<td>Access and use of the utility HAN</td>
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<td>Ombudsman schemes</td>
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<tr>
<td>Consumer engagement</td>
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<td>Safety issues uncovered during installation</td>
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<td>Safety of radiofrequency emissions</td>
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<td>Safety of remote reconnection of supply</td>
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### Proposed Draft Policy Positions and Consultation questions

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<td><strong>Consultation Question 2.1 - Setting network tariffs</strong></td>
<td>2.1. Are there any changes required to the rules and regulation including the relevant sections of the distribution pricing rules in chapter 6 of the National Electricity Rules as a result of the potential new pricing arrangements enabled by smart meters?</td>
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<td>2.2. How can effective choice of tariffs for consumers be facilitated given likely network pricing behaviour and retail pressures?</td>
</tr>
<tr>
<td>Box 4</td>
<td><strong>Draft Policy Positions 1, 2 and 3 – Critical peak price tariff and critical peak rebates</strong></td>
<td>1. Critical peak price tariffs can be set by both distributors and retailers, but only offered by retailers.</td>
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<td>2. Critical peak rebates can be offered by retailers or distributors.</td>
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<td>3. Critical peak pricing tariffs and critical peak rebates must be offered as a voluntary product and only established with a consumer’s explicit informed consent.</td>
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<td>Box 5</td>
<td><strong>Consultation Questions 2.3, 2.4, and 2.5 – Critical peak price</strong></td>
<td>2.3. What supporting arrangements might be put in place to help consumers gain a better understanding of and benefit from CPP tariffs?</td>
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<td>2.4a. Should minimum terms and conditions be specified for CPP contracts?</td>
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<td>2.4b. If so what specific issues might be covered?</td>
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<td>2.5. Should there be protocols on how a distributor can offer a CPR and a retailer CPP or CPR offers to the same consumer?</td>
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<td>Box 6</td>
<td>Consultation Question 2.6 – Locational network pricing</td>
<td>2.6. What alternatives to tariff-based incentives might be facilitated through smart metering in order to manage locational network issues?</td>
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<td>Box 7</td>
<td>Consultation Question 2.7 – Load control tariffs</td>
<td>2.7. How can the issue of consumers who lose access to dedicated circuit off peak rates be addressed?</td>
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<td>Box 8</td>
<td>Consultation Question 2.8 - consumer choice of tariffs</td>
<td>2.8a. Should all retailers be required to offer a range of retail tariff options to customers including flat tariffs?</td>
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<td>2.8b. If retailers are required to provide a range of tariff options to customers does this also mean that networks should also offer a range of network tariffs for retailers?</td>
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<td>2.8c. Should these arrangements, if adopted, be transitional? If so, what conditions need to be satisfied before the arrangements can be reconsidered?</td>
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<td>Box 9</td>
<td>Consultation Question 2.9 – Transfers without penalty</td>
<td>2.9a. Should there be a transitional period which allows consumers to move between contracts without penalty?</td>
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<td>2.9b. If so, what conditions need to be satisfied before the arrangements can be reconsidered?</td>
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<tr>
<td>Box 10</td>
<td>Consultation Questions 2.10, 2.11 – Supporting informed choice for consumers</td>
<td>2.10. What arrangements need to be put in place to reduce complexity for consumers and assist them to understand the different offers in the market?</td>
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<td></td>
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<td>2.11a. Does there need to be monitoring of new pricing arrangements to ensure that complexity does not impede the realisation of demand response and consumer benefits?</td>
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<td></td>
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<td>2.11b. Should the AER undertake such monitoring?</td>
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<td>Box 11</td>
<td>Consultation Question 2.12– General Transitional Arrangements</td>
<td>2.12. Are there any other transitional arrangements that would help consumers adjust to new pricing arrangements?</td>
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<td>Box 12</td>
<td>Consultation Question 2.13 – Permanent flat tariff for vulnerable consumers</td>
<td>2.13a. Should a flat tariff option be available for vulnerable consumers on a permanent basis?</td>
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<td></td>
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<td>2.13b. Should that option be required for both standing offers and market offers?</td>
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<tr>
<td>Box 13</td>
<td>Draft Policy Position 4 –</td>
<td>4. The AER should monitor whether hardship</td>
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<td>Box 14</td>
<td><strong>Consultation Question 2.14</strong></td>
<td>2.14. Should retailers be obliged to recommend the most appropriate tariff to consumers in their hardship program?</td>
</tr>
<tr>
<td>Box 15</td>
<td><strong>Concessions regimes</strong></td>
<td>Recognising that Concession regimes are a jurisdictional responsibility, States and Territories may wish to review their concessions frameworks in light of the services supported by smart meters.</td>
</tr>
<tr>
<td>Box 16</td>
<td><strong>Community service obligations</strong></td>
<td>Recognising that CSOs are jurisdictional responsibility, States and Territories may wish to review their CSO frameworks in light of the services supported by smart meters.</td>
</tr>
</tbody>
</table>

**Third Party Service Providers**

| Box 17 | **Consultation question 3.1 – Issues for third parties in market** | 3.1. Are there further issues to those outlined above that need to be considered for third parties who are not agents of the distributors or retailers? |
| Box 18 | **Draft Policy Position 5 – Third parties service providers** | 5. EMRWG considers, except for the case of the provision of customer's data, that there are important issues to be resolved in providing for third parties in the market framework and systematic consideration should be given to these issues in the overall development of market arrangements for the delivery of smart meter services to consumers. |
| Box 19 | **Consultation questions 3.2 and 3.3 – Third party services** | 3.2 What services - other than those listed above - could be made available by third parties though a customer's smart meter?  
3.3 What controls should apply to third parties in relation to such service offerings? |

**Demand Management – Supply Capacity Control**

<p>| Box 20 | <strong>Draft Policy Position 6 – SCC as a mandatory function for network emergencies</strong> | 6. Distributor-initiated SCC will be allowed for emergencies to manage network demand. |
| Box 21 | <strong>Draft Policy Position 7 – SCC as a discretionary distribution product</strong> | 7. Distributors should be allowed to offer SCC as a discretionary product to manage network demand, subject to the appropriate consumer protections |</p>
<table>
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<tr>
<th>Box 22</th>
<th>Consultation Questions 4.1, 4.2 and 4.3.– SCC as a discretionary distribution product</th>
</tr>
</thead>
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<tr>
<td></td>
<td>4.1 Are the existing planned interruptions of supply rules sufficient to protect customers if SCC was offered as a product by distributors?</td>
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<tr>
<td></td>
<td>4.2. How ready are the distribution businesses to offer these products to consumers?</td>
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<tr>
<td></td>
<td>4.3a What additional consumer protections, including marketing requirements, should be placed on distributors in offering these products to consumers?</td>
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<tr>
<td></td>
<td>4.3b. What information should be provided to consumers with these products, and who should be responsible for providing it?</td>
</tr>
<tr>
<td>Box 23</td>
<td>Draft Policy Position 8– SCC as a discretionary retail product</td>
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<td></td>
<td>8. For avoidance of doubt, SCC may not be used as an alternative to disconnection action and may not be offered to any customers entering or participating in a hardship program.</td>
</tr>
<tr>
<td>Box 24</td>
<td>Consultation question 4.4 – SCC as a discretionary retail product</td>
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<tr>
<td></td>
<td>4.4a In what circumstances might consumers benefit from SCC as a discretionary retail product?</td>
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<td></td>
<td>4.4b How ready is the market to offer these products?</td>
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<td></td>
<td>4.4c What consumer protections should apply if these retail products were offered?</td>
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<tr>
<td></td>
<td>4.4d How could the risk of ensuring that these products are not offered, or accepted, by consumers as a means of avoiding de-energisation or mitigating financial hardship be managed?</td>
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<tr>
<td>Box 25</td>
<td>Policy Position 9 - Third parties and discretionary SCC</td>
</tr>
<tr>
<td></td>
<td>9. EMRWG considers that at least the same controls as apply to retailers and distributors should apply to third parties regarding any offer of SCC to consumers as a discretionary product.</td>
</tr>
<tr>
<td>Box 26</td>
<td>Consultation Question 4.5 – SCC and embedded generation</td>
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<tr>
<td></td>
<td>4.5a Under what circumstances could export supply capacity control be used?</td>
</tr>
<tr>
<td></td>
<td>4.5b Should energy exported to the grid be subject to a supply capacity limit?</td>
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<td>4.5c. If so, how should this limit be set?</td>
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**Demand Management – Direct Load Control**
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<th>Box 27</th>
<th><strong>Draft Policy Position 10 and 11 – Offers of DLC</strong></th>
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<tbody>
<tr>
<td></td>
<td>10. Distributors, retailers may offer DLC products and services to consumers.</td>
</tr>
<tr>
<td></td>
<td>11. In principle, third parties may also offer DLC products and services to consumers.</td>
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</tbody>
</table>

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<tr>
<th>Box 28</th>
<th><strong>Consultation question 5.1 - third party offers of DLC</strong></th>
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<tbody>
<tr>
<td></td>
<td>5.1a What issues arise for third parties who are not agents of the distributors or retailers in providing DLC products to consumers for energy management purposes?</td>
</tr>
<tr>
<td></td>
<td>5.1b. Are consumers sufficiently protected by these third parties' compliance with the general consumer law or should consideration be given to incorporating these functions in the energy Rules?</td>
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<tr>
<th>Box 29</th>
<th><strong>Draft Policy Positions 12, 13 and 14 – DLC contractual arrangements</strong></th>
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<tr>
<td></td>
<td>12. To access DLC customers will be required to enter into separate contracts with the distributor and/or retailer, and must give explicit informed consent to those contracts.</td>
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<td>13. For a transitional period, DLC contracts would have a maximum length of 24 months and during the transitional period, customers will have the right to exit the contract without penalty.</td>
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<td>14. In the longer-term, these contracts may contain a cost that the customer incurs for early termination of the contract. This must be clearly stated and reflective of the true cost to the business of this early cessation of the contract.</td>
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<th><strong>Consultation Questions 5.2 – DLC contractual arrangements</strong></th>
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<tr>
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<td>5.2a. Are there any unintended consequences of enabling consumers to enter into DLC contracts with one or more parties?</td>
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<td>5.2b. What conditions need to be satisfied before the transitional arrangements (if any) can be reconsidered?</td>
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<td>5.2c. What additional consumer protections, including marketing requirements, should be placed on distributors in offering these products to their customers?</td>
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<th>Box 31</th>
<th><strong>Draft Policy Position 15 – Contractual arrangements on moving premises</strong></th>
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<tbody>
<tr>
<td></td>
<td>15. DLC contracts will terminate when a consumer moves house, unless otherwise agreed with the customer. Terms and conditions must be clearly stated in the contract.</td>
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</tbody>
</table>
| Box 32 | **Consultation Questions 5.3** - DLC and explicit informed consent | 5.3a Are there additional steps to those in the NECF and ACL which should be taken by parties offering DLC to ensure that explicit informed consent is obtained?  
5.3b. Should guidelines be produced to assist parties to obtain this consent?  
5.3c. Who should develop and monitor these guidelines? |
| Box 33 | **Draft Policy Positions 16, 17 and 18** – DLC and customer exclusions | 16. Appropriate provisions would be incorporated into the NECF to ensure that DLC services would not be offered to customers registered with medical life support requirements.  
17. No customer will be required to involuntary place any appliance on DLC, including as a condition of participation in a hardship program.  
18. Retailers must demonstrate that, if customers on a hardship program have agreed to a DLC service, this service is co-ordinated with all other assistance provided to customers. |
| Box 34 | **Consultation Question 5.4** - DLC and exclusions | 5.4. Are there any groups who should not be offered DLC services? |
| Box 35 | **Consultation Question 5.5** - Notification of load control | 5.5. Should customers be informed when load control is activated? |
| Box 36 | **Consultation Question 5.6** - DLC and manual override | 5.6. As the manual override of some DLC services may produce adverse consequences for consumers, including reduced financial benefits, is it a service which should be offered in a contract? |

**Customer Billing**

| Box 37 | **Draft policy position 19** - accumulated readings on the bill | 19. In accordance with the requirements of the National Energy Retail Rules, the bill should contain an accumulated total for the start and end reads derived from the smart meter. |
| Box 38 | **Draft Policy Position 20** - Time-based tariffs | 20. All TOU retail tariffs should be published as applying on the local time, rather than AEST and this should be clearly specified in the tariff information. |
| Box 39 | Draft Policy Position 21 – Notification of estimates/substitutes on customers’ bills | 21. In advising customers that a bill contains estimated and/or substituted data, retailers are to describe the data as ‘estimated’ in all circumstances. |
| Box 40 | Consultation questions 6.1 and 6.2 - Notification to customers of estimations | 6.1. What are the costs and benefits of:  
   a) using a threshold approach?  
   b) showing the scope of any estimations on the bill?  
   6.2a. Should a threshold be applied to the reporting of the scope of estimations on the bill?  
   6.2b If a threshold is used how should this threshold be determined?  
   6.2c. How should customers be informed of the threshold if implemented? |
| Box 41 | Draft Policy Position 22 and 23 – Estimations methodology | 22. A customer’s past behaviour during the previous CPP event (if available) should be used in estimating their consumption in the event of a meter failure during a CPP event.  
   23. All customers should have the right to challenge estimated readings on the bill if they believe that the estimate is not a reasonable estimate of their likely energy use. |
| Box 42 | Consultation Question 6.3 - Estimations methodology for critical peak pricing | 6.3a. Should changes to the metrology procedure be made to more accurately establish an estimation methodology in critical peak pricing?  
   6.3b. If so, how should these changes be progressed? |
| Box 43 | Draft policy position 24 – Monitoring of estimated and substituted data | 24. AER will having an ongoing role in monitoring the use of estimated and substituted data. |

**Consumer Engagement**

| Box 44 | Consultation Questions 7.1 and 7.2 – Objectives of consumer engagement | 7.1a. Are the objectives of the consumer engagement program sufficiently comprehensive?  
   7.2b. If not, what other objectives should be identified? |
| Box 45 | Draft Policy Position 25 – Co-ordination of consumer engagement by Government | 25. The Commonwealth government and/or the state or territory governments should have a co-ordinating role in the consumer engagement program for the widespread installation of smart meters to enhance the understanding of the program by the community. |
| Box 46 | Consultation Question 7.3 - Role of government in non-mandated rollout | 7.3. What should be the co-ordinating role of government in a consumer engagement program in the absence of a mandated roll out? |
| Box 48 | Draft policy position 26 – Involvement of stakeholders in consumer engagement programs | 26. To develop relevant strategies for the consumer engagement program and to recommend the most appropriate strategies for different customer groups and circumstances, the involvement of industry and consumer representatives is essential. |
| Box 49 | Consultation Question 7.4 – responsibility for different stages of consumer engagement | 7.4a. Who should take the lead role for consumer engagement and the provision of consumer education and information at each stage of a mandated roll out?  
7.4b. Does this responsibility change with a non-mandated rollout? |

**Customers’ Access to Data through the Home Area Network**

| Box 50 | Policy position 27 – Registering Devices on the HAN | 27. Customers will be able to register a device on the HAN without having to enter into a contract with any party |
| Box 51 | Consultation question 8.1- Registering Devices on the HAN | 8.1. Should such registration be provided at no direct cost to the customer? |
| Box 52 | Draft Policy Position 28– Access Implications of Registration | 28. Registering an IHD device or other device capable of receiving and displaying metering data and logging on to a web portal provided constitutes a request for access to metering data. |
| Box 53 | Consultation question 8.2 – Consumers’ access to data | 8.2. Should consumers be able to access their own meter data via an IHD, web portal or similar devices free of charge? |
| Box 54 | Draft Policy Position 29 – Third party access to data | 29. In accordance with current practice, consumers may authorise provision of their data to any authorised third party. |
| Box 55 | Consultation question 8.3– Third party access to data | 8.3. Are there any policy or regulatory changes needed to ensure that where consumers give consent to third parties to access their data this can be readily implemented? |
| Box 56 | Draft Policy Positions 30, 31 and 32 – Messaging through the IHD | 30. Distributors can send messages on imminent power emergencies and planned interruptions, in accordance with the regulatory requirements, to consumers through their IHD without consent.  
31. Neither the retailer nor distributor, or any third party, can send marketing or similar information to consumers through the IHD without the customers’ explicit informed consent to receive the information.  
32. For retailers this consent can be obtained at the entry to the contract or during the contract period. Distributors and other third parties must have clear mechanism whereby this content is obtained. All parties must be able to provide clear evidence of this informed consent. |
| Box 57 | Consultation Question 8.4 – Messaging through the IHD | 8.4a Is it reasonable to assume that the retailer could send information on pending price increases and other changes to contractual terms through the IHD without a customer’s consent?  
8.4b. If not, should the retailer obtain the prior explicit informed consent of the customer for using this medium for transmitting such information. |

**Independent Dispute Resolution for Customers**

| Box 59 | Consultation Questions 10.1 and 10.2 – Third party entry to Ombudsman schemes | 10.1 Should any party offering products such as DLC through the HAN become members of the relevant Energy Ombudsman scheme?  
10.2 What are the implications and risks of this approach? |

**Metering Installations and Customer Impacts**

<p>| Box 60 | Draft Policy Positions 33 and 34 – Customer Impacts and metering installations | 33. Low income households should not be placed in additional or unexpected financial hardship as a result of the need for electrical repairs being identified during the installation of a smart meter at their premises. |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>34.</td>
<td>Jurisdictions should be responsible for determining how to assist low income customers in these circumstances, depending on the nature of their rollout.</td>
<td></td>
</tr>
</tbody>
</table>

**Radio Frequency Emissions and Smart Meters**

<table>
<thead>
<tr>
<th>Box 61</th>
<th>Draft Policy Position 35 - Radiofrequency Emissions and Smart Meters</th>
<th>35. Consumers must be informed about the standards which apply to radiofrequency emissions in respect to smart meters, the obligations on distribution businesses to comply with these standards, the outcomes of any relevant trials, and the compliance monitoring role of ACMA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box 62</td>
<td>Consultation Question 12.1 - Radiofrequency Emissions and Smart Meters</td>
<td>12.1. Who should be responsible for communicating information to consumers? What role should the distribution businesses take?</td>
</tr>
</tbody>
</table>

**Remote Energisation/Re-energisation and Customer Safety**

| Box 63 | Draft Policy Position 36, 37 and 38 - Remote energisation and re-energisation | 36. Remote energisation and re-energisation should become the standard practice across all jurisdictions.  
37. Remote re-energisation could be carried out using the Arm or Monitor Supply functions of smart meters, depending on the jurisdictional decisions.  
38. Jurisdictions should amend legislation, regulations and codes of practice to facilitate the implementation of remote energisation and re-energisation as standard practice for smart meters. |
|---|---|---|
| Box 64 | Draft Policy Positions 39 and 40 - Customer information | 39. Guidance must be provided to customers to assist them to undertake the relevant safety checks in their premises before remote energisation or re-energisation is undertaken.  
40. Retailers and distributors must not remotely energise or re-energise if they are not assured it is safe to do so. |
<p>| Box 65 | Consultation Question 13.1 – Customer information | 13.1 What are the options for providing guidance to customers on their obligations regarding remote energisation and re-energisation of electricity supply? |</p>
<table>
<thead>
<tr>
<th>Box</th>
<th>Draft Policy Position</th>
<th>Description</th>
</tr>
</thead>
</table>
| 66  | 41 and 42 – Customer Choice | 41. Customers may be offered the option of a manual energisation or re-energisation, which may be on a cost-recovery basis.  
42. Jurisdictions should make provisions to assist disadvantaged groups of consumers for whom remote energisation or re-energisation is not appropriate. |
| 67  | Consultation Questions 13.2 – Customer choice | 13.2. What are the implications for these customer's premises being energised or re-energised using the on command or the switch on and monitor supply command? |
| 68  | Draft Policy Position 43 – Customer access to the meter | 43. Electricity retailers and/or DNSPs must develop procedures for the remote energisation or re-energisation of premises where customers do not have convenient access to their meter. |
| 69  | Consultation Questions 13.3 – Customer access to meter | 13.3a When an energisation request is made by a customer should distributors and retailers ensure that the safety risks are mitigated by asking the customer to ensure that the main switch is turned off?  
13.3b. What additional requirements are necessary when customers with smart meters make a request for an energisation that a remote energisation is carried out safely? |
| 70  | Draft Policy Position 44 and 44 – Worker health and safety | 44. Training and communication for electrical tradespeople should be promoted to raise awareness of the possibility of remote re-energisation when electrical work is undertaken.  
45. Codes of practice, guidelines and other documentation relevant to the electrical trades should be amended to recognise the possibility of remote re-energisation. |

**National Minimum functionality and Embedded Generation**

| Box | Consultation question 14.1 - embedded generation | 14.1. Are there any areas in which the minimum functionality may inhibit the use of embedded generation? |
### Possible Effects on Customers’ Bills

#### Table 2: Hypothetical effects on bills for different groups and possible policy response at peak times

<table>
<thead>
<tr>
<th>Consumer has lower proportion of their consumption at peak times</th>
<th>Response of customers to alternative tariff</th>
<th>Additional possibility of overall reduction in consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible lower overall bill due to lower prices at off peak times</td>
<td>Possible lower overall bill due to lower prices at off peak times</td>
<td>Possible but less likely – as electricity cheaper at off peak times</td>
</tr>
</tbody>
</table>

**Additional policy response**

- Education campaign and provision of direct information to consumers on their energy usage may reduce apathy
- Hardship provisions and concessions may be triggered for vulnerable consumers
- Energy efficiency policies aimed at this group to enable demand response

| Consumer has average consumption at peak times | Likely increase in bill | Likely increase in bill | Effect on bill is ambiguous lower consumption at peak times could be offset by higher prices on the remaining peak consumption | Possible that some of the peak consumption is reduced permanently (e.g. air conditioner usage) |

**Additional policy response**

- Education campaign and provision of direct information to consumers on their energy usage may reduce apathy
- Hardship provisions and concessions may be triggered for vulnerable consumers
- Energy efficiency policies aimed at this group to enable demand response

| Consumer has higher than average consumption at peak times | Almost certain increase in bill | Almost certain increase in bill | Effect on bill is ambiguous lower consumption at peak times could be offset by higher prices on the remaining peak consumption | Likely that some of the peak consumption is reduced permanently |

**Additional policy response**

- Education campaign and provision of direct information to consumers on their energy usage may reduce apathy
- Hardship provisions and concessions may be triggered for vulnerable consumers
- Understanding of why this group has high peak load but is unable to respond (e.g. medical reasons)- concession regimes may need to be reframed to ensure this group is protected
- Energy efficiency policies aimed at this group to enable demand response

| None required although consideration needs to be given to measures that ensure the response is maintained
| Could be a potential target for DLC or associated products to shift extra load

**Consumer has average consumption at peak times**

- Possible lower overall bill due to lower prices at off peak times
- Possible lower overall bill due to lower prices at off peak times
- Possible lower overall bill due to lower prices at off peak times

**Additional policy response**

- General policy aimed at increasing energy efficiency

**Consumer has higher than average consumption at peak times**

- Possible lower overall bill due to lower prices at off peak times
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- Possible lower overall bill due to lower prices at off peak times

**Additional policy response**

- General policy aimed at increasing energy efficiency

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- Possible lower overall bill due to lower prices at off peak times

**Additional policy response**

- General policy aimed at increasing energy efficiency
Eligibility criteria for each concession vary between jurisdictions. Generally to receive a concession the customer must hold a concession card such as the Health Care Card, and/or receive a Centrelink pension.

Table 3 Concessions in each jurisdiction

<table>
<thead>
<tr>
<th>Concession type</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas</th>
<th>ACT</th>
<th>NT</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Electricity rebate/concession</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>General concession/rebate to concession cardholders</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Electricity life support</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Provides assistance to customers with life support machines at home</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Medical cooling/heating</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Assist in heating and/or cooling costs for those unable to regulate body temperature</td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Air conditioning rebate</td>
<td></td>
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<tr>
<td>Off-peak concession</td>
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<tr>
<td>Concession on off-peak component</td>
<td>Yes – 13% on off peak component</td>
<td>Not available</td>
<td>In limited areas</td>
<td></td>
<td></td>
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<tr>
<td>Transfer Fee waiver</td>
<td></td>
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<tr>
<td>Waives change fees on moving house</td>
<td>Yes on change of occupancy</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Winter Energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Paid between May and November?</td>
<td>Yes – 17.5 on winter bills</td>
<td>Not available</td>
<td>Heating allowance</td>
<td></td>
<td></td>
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<tr>
<td>Service to property charge</td>
<td></td>
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</tr>
<tr>
<td>Reduces the supply charge for low volume users</td>
<td>Yes –</td>
<td>Not available</td>
<td>Yes - limited</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Emergency payment assistance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>