









5 June 2014

Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 Sydney South, NSW 1235

Project number: ERC0169

Dear Mr Pierce,

### RE: NATIONAL ELECTRICITY AMENDMENT (EXPANDING COMPETITION IN METERING AND RELATED SERVICES) RULE 2014

CitiPower and Powercor Australia, United Energy, SP AusNet and Jemena Electricity Networks (**Victorian DNSPs**) welcome the opportunity to respond to the Australian Energy Market Commission's (**the Commission**) consultation paper into expanding competition in metering and related services.

The metering arrangements that currently exist in Victoria differ to the broader national market. In this context, the Victorian DNSPs are in a unique position to respond to the Commission's consultation paper. In particular, the Victorian DNSPs response focuses on three key issues:

- The importance of clearly defining the roles and responsibilities of all stakeholders within a sound economic framework;
- The objectives that should be considered when determining the proposed exit fee in Victoria;
   and
- The metering coordinator's ability to exercise monopoly power when negotiating terms and conditions with distribution businesses for access to the network functionality (including data and services) enabled by smart meters.

If you have any queries regarding this submission please do not hesitate to contact Renate Tirpcou on (03) 9683 4082, or <a href="mailto:rtirpcou@powercor.com.au">rtirpcou@powercor.com.au</a>.

Yours sincerely,

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on behalf of the Victorian Electricity Distribution Businesses









# National Electricity Amendment (Expanding Competition in Metering and Related Services) Rule 2014

# Joint submission by the Victorian electricity distribution businesses

5 June 2014

#### Victorian DNSPs joint submission to the AEMC's consultation paper

**Project number: ERC0169** 

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#### 1 Executive Summary

The metering arrangements that currently exist in Victoria differ to the broader national market. In this context, the Victorian DNSPs are in a unique position to respond to the Australian Energy Market Commission's (**the Commission**) consultation paper on expanding competition in metering and related services.

Specifically, Victoria is the only jurisdiction that has mandated a roll out of advanced metering infrastructure (**AMI**) to small customers. At present, over 90 per cent of all eligible customers in Victoria have a smart meter installed. This represents approximately 25 per cent of the total market meters in Australia.

The introduction of competition needs to be developed within a sound economic framework. For example, the Victorian DNSPs are already utilising smart meter data and services to obtain network benefits. The smart meter framework in Victoria, therefore, must have the primary focus of protecting and enhancing these smart meter enabled services—unlike in other states, it does not need to facilitate the installation of smart meters. To ensure the safety, reliability and security of supply, the development of the competitive framework should further recognise the need for DNSPs to be able to exercise the required level of network control as a first order obligation. The model also needs to align the liabilities of particular stakeholders with their corresponding responsibilities.

The Victorian DNSPs support effective and efficient exit fees. That said, the primary objective of exit fees should be to protect the significant sunk investments that Victorian distribution businesses have already made in AMI meters. Given the mandated nature of the rollout program, Victorian DNSPs should not be exposed to any technology or market risk.

Moreover, exit fees should promote competition that improves overall economic efficiency. Costs are likely to be imposed on DNSPs, and hence on all customers, when customers change metering coordinators. These costs should be reflected in any exit fee, so that customers that choose to not churn metering coordinators are no worse off as a result of another customers decision to churn.

The Victorian DNSPs also consider the Commission has overstated any monopsony power of a local DNSP relative to the monopoly power of the metering coordinator. The opportunity cost to the Victorian DNSPs of accessing the data and services enabled by smart meters is significant. Critically, if the cost to purchase the data and services outweigh the benefits, the full range of AMI network benefits will not be realised. Such an outcome would unlikely be in the long term interests of consumers. It is noteworthy that customers have been paying for the mandated smart meter rollout since January 2009, and customers' representatives have expressed their expectation to see the full range of AMI network benefits.

Finally, this submission proposes the default metering coordinator should be the local DNSP (as opposed to the retailer), where a consumer elects to not contract directly for the services of a metering coordinator.<sup>1</sup> This will provide a simpler economic model and a smooth transition to the new framework without compromising competition.<sup>2</sup>

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This submission uses the term 'metering coordinator' for the entity with responsibility for the metrology and market service from smart meters. As discussed in the ENA's submission, however, the Victorian DNSPs consider the case has not been made for introducing the metering coordinator role.

AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney, p. 27.

#### 2 Introduction and background

The Australian Energy Market Commission (**the Commission**) has published a consultation paper in relation to a rule change proposal submitted by the Standing Council on Energy and Resources (**SCER**). The rule change proposal is to expand competition in metering and related services.

CitiPower and Powercor Australia, United Energy, SP AusNet and Jemena Electricity Networks (**the Victorian DNSPs**) welcome the opportunity to respond to the Commission's consultation paper. In particular, the Victorian DNSPs response focuses on three key issues:

- The importance of clearly defining the roles and responsibilities of all stakeholders within a sound economic framework;
- The objectives that should be considered when determining the proposed exit fee in Victoria; and
- The metering coordinator's ability to exercise monopoly power when negotiating terms and conditions with distribution businesses for access to the network functionality (including data and services) enabled by smart meters.

The submission also responds to a selection of the questions outlined in the Consultation Paper. These are included in Appendix A.

#### 2.1 Victorian metering arrangements

The metering arrangements that exist in Victoria differ significantly to other jurisdictions. In particular, over 90 per cent of all eligible customers in Victoria now have a smart meter installed. The context of this roll out program is critical. As such, prior to reading this submission, stakeholders should recognise the two key points:

#### The AMI roll out program was mandated by the Victorian Government:

The Victorian DNSPs purchased meters of a certain minimum functionality and installed them over a certain timeframe, both of which were mandated by the Victorian Government. It would be inappropriate, therefore, if the exit fee approach resulted in any market and/or technology risk to being allocated to the Victorian DNSPs. Allocating such risk to DNSPs may also stifle future investment in electricity related services, as it provides an adverse signal to financial markets on the security of investments in the Victorian industry. The criteria developed to guide the AER in the determination of exit fees, therefore, should ensure this outcome is avoided—that is, ensure that cost recovery is achieved.

## A significant proportion of the forecast benefits of the rollout program are network related:

In the most recent cost–benefit analysis of the AMI program, a material portion of the overall benefits of the rollout were attributable to network services (which benefit all customers through improved supply and outage services and increased network utilisation).<sup>3</sup> The Victorian DNSPs are already delivering on many of these network benefits. The development of the institutional and regulatory frameworks that support competition in metering services, therefore, should recognise that AMI meters provide benefits not only to the individual customers served by that meter, but to the broader customer base served by the network in which that meter is located.

Appendix B provides further background on the specific metering arrangements in Victoria.

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Deloitte, Advanced metering infrastructure cost benefit analysis, Final report for Department of Treasury and Finance, 2 August 2011.

#### 3 Developing a robust framework to promote competition

This section discusses the importance of developing a sound economic framework, and clearly defining stakeholder roles and responsibilities. These are critical to enable competition to deliver genuine benefits to consumers.

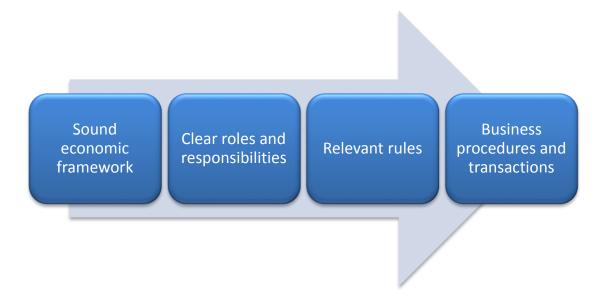
#### 3.1 Robust framework—now and for the future

Developing a sound economic framework to promote competition in the provision of metering and related services is a complex task. Before introducing competition in the Victorian market, there are a number of requirements which must be addressed, including the following:

- Customers are no worse off following the introduction of the Commission's competition framework;
- AMI benefits continue to be realised for customers;<sup>4</sup> and
- The Victorian DNSPs achieve full cost recovery of AMI sunk investment.

Given a sound economic framework, and a clear definition of stakeholder responsibilities (discussed further in section 3.2), the relevant rules can then be drafted. This will ensure the rules are developed to reflect a workable model which ensures the above key requirements are addressed. As shown in figure 1, the final step would be the determination of business systems and processes, including protocols and the smart meter minimum functionality.

Figure 1 Developing a robust framework to promote competition



There is a risk the full range of benefits will not be achieved with metering competition due to the complexity and cost of networks accessing near real time data for management of supply.

The Victorian DNSPs recognise the segmented approach the Commission intends to take in developing the framework. It is important, however, the whole framework makes economic sense for consumers, and is robust for the challenges that lie ahead. The Victorian DNSPs have concerns as to whether the Commission's current program and approach, as we understand it, is consistent with this model.

#### 3.2 Development of roles and responsibilities

The importance of appropriately setting out the roles and responsibilities of stakeholders is fundamental to developing a robust framework to promote competition. The Energy Network Association (**ENA**) submission to the consultation paper discusses this in the context of ensuring the safety and security of energy supply, as well as the realisation of network benefits through smart meters. The Victorian DNSPs also expressed similar views to the Commission in response to the Victorian Jurisdictional Derogation AMI rule change.<sup>5</sup>

In particular, the Victorian DNSPs consider the following examples illustrate three important considerations:

#### DNSPs should retain switching rights over and above all other parties:

Load management represents a key tool for DNSPs to manage the safety, reliability and security of energy networks. It allows DNSPs to better manage network utilisation (leading to reduced augmentation). Importantly, it also allows DNSPs to control denergisation of the network for safety reasons, or to manage emergencies with minimal societal impact. In this context, DNSPs should retain switching rights as a first order obligation.

#### Liabilities should be aligned with the corresponding responsibilities:

As the ENA highlight in their submission to the consultation paper, the Commission's proposed framework holds the metering coordinator responsible for a number of functions now with DNSPs—for example, customer switching. If erroneous switching of bulk numbers of customers occurs through the metering coordinators' systems, under the Commission's proposed framework the DNSPs would be exposed to adverse financial impacts through the service target performance incentive scheme (STPIS). These liabilities, and others associated with metering coordinators' actions, should be met by metering coordinators.

Further, it is highly unlikely the metering coordinator will sign up to a contract which aligns the liabilities with the corresponding responsibilities. The significant material

Victorian DNSPs, Joint submission: National Electricity Amendment (Victorian Jurisdictional Derogation, Advanced Metering Infrastructure) Rule 2013, 1 August 2013.

adverse financial impacts from the STPIS outweigh the benefit from providing services such as load management.

#### Network benefits should continue to be realised:

The introduction of smart meters in Victoria has facilitated a wide range of network benefits. The Victorian DNSPs identified many of these benefits in response to the Victorian Jurisdictional Derogation AMI rule change. These are set out in table 2 in appendix B.

Moreover, the determination of roles and responsibilities should be resolved prior to the drafting of rules. The framework discussed in the Commission's consultation paper requires significant changes to roles and responsibilities entrenched in the market and in regulatory environments today. It will be necessary to make changes to the National Energy Customer Framework, the National Electricity Rules and National Electricity Retail Rules, the National Electricity Retail Law, AER guidelines, MSATS procedures, National Metrology Procedures, B2B procedures, accreditation checklists and distribution licences. There needs to be extensive communication programs to inform retail customers of changes to established network services which are currently provided by DNSPs (e.g. disconnection and reconnection of supply). It is unclear how the magnitude of these changes is consistent with the Commission's proposed assessment criteria—that administrative burden and transaction costs should be minimised, or that network services should be clear, transparent and predictable.

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Victorian DNSPs, Joint submission: National Electricity Amendment (Victorian Jurisdictional Derogation, Advanced Metering Infrastructure) Rule 2013, 1 August 2013.

#### 4 Determination of exit fees

In its consultation paper, the Commission stated the following:

- A regulated exit fee would apply to allow a retailer or consumer to replace a meter installed under the AMI program;<sup>7</sup> and
- Consideration would be given as to whether the criteria used to determine exit fees for type 5–7 meters are also appropriate for smart meters.<sup>8</sup>

Moreover, the Commission outlined the following criteria to guide the AER in its approval of exit fees:<sup>9</sup>

- The fee must be reasonable.
- The fee should be based on the average depreciated value of the stock of the distribution business's existing accumulation and manually read interval meters.
- This is for simplicity and administrative ease, as an alternative to attempting to determine the age of the actual meter at each individual consumer's premise.
- The fee may include efficient and reasonable costs associated with transferring the customer to another Metering Coordinator.
- The fee for type 5 metering installations may differ from the fee for type 6 metering installations.
- Where a meter is installed that is not compliant with the new and replacement policy and minimum functionality required by that jurisdiction, exit fees would not apply.

The Victorian DNSPs recognise there are different drivers of the exit fee model for smart meters (in Victoria) compared with accumulation meters (in other jurisdictions). The Victorian DNSPs consider the criteria used to guide the AER in its approval of exit fees for Victorian distribution businesses (for smart meter replacements), should reflect a hierarchy of criterion. In particular, for meters rolled out as part of the Victorian AMI program, the two highest level criteria must be:

AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney, p. 52.

AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney, p. 65.

AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney, pp. 51–52.

- Provide Victorian network businesses with the ability to recover the unrecovered asset value of any metering installation (including supporting communications and back office systems) that is replaced by a retailer or consumer; and
- Promote competition that improves overall economic efficiency, having regard to any efficiency losses (costs and forgone benefits) imposed on DNSPs and hence customers due to a customer taking up that competitive market offer.

The following subsections discuss these criteria, as well as those outlined in the consultation paper, in greater detail.

#### 4.1 Recovery of the unrecovered asset value

The Victorian DNSPs consider it is fundamental to establish a floor on the level of the regulated exit fee for meters installed under the AMI program. This floor would be designed to protect the significant sunk investments Victorian distribution businesses have already made in AMI meters. Any uncertainty around how (or if) the recovery of sunk investments in metering will be recovered significantly increases the risk premium to Victorian DNSPs. This would represent an inefficient allocation of risk in Victoria, as it would effectively allocate the technology and market risk to Victorian distribution businesses. This is despite those metering investments being mandated by the Victorian government.<sup>10</sup> This risk is further magnified by the overall size of the investment program undertaken in Victoria, and may have material implications on the financial position of the Victorian DNSPs.

The Victorian DNSPs observe that the 'floor' on the exit fee is analogous to the framework outlined in the Cost Recovery Order in Council (CROIC) for deriving exit fees under the AMI program, which will apply until 2020. In particular, the CROIC requires that where a retailer subsequently becomes the responsible person with respect of a metering installation (for a customer with annual electricity consumption of 160MWh or less), that exit fee, amongst other things, reflects:<sup>11</sup>

- the written down value of the meter (assuming that depreciation is calculated on a straight line basis);
- the proportion referable to that metering installation of the written down value of commissioned telecommunications and information technology systems; and

This situation can be compared and contrasted with that of a distribution business (or for that matter, an energy retailer) who *elects* to enter into the metering market to install a meter of a certain functionality at a certain time, which subsequently becomes redundant due to changes in metering technology or market conditions. In this scenario, there is a lesser case to allocate this risk to the customer, instead of the distribution business (or energy retailer).

<sup>&</sup>lt;sup>11</sup> Clause 7.2 of the Order in Council made on 21 December 2011 and published in the Victoria Government Gazette G51 on 22 December 2011

a reasonable rate of return on the written down value.

In summary, any criteria underpinning the derivation of exit fees in Victoria should place primacy on the need for DNSPs to recover the written down value of any metering installation that is no longer required. Given the mandatory nature of the AMI program in Victoria, to do otherwise would represent an inappropriate and inefficient allocation of risk. It may also stifle future investment in electricity related services, as it provides an adverse signal to financial markets on the security of investments in the Victorian industry. The Victorian DNSPs consider this impossible to reconcile with the requirements of the NEO, which focuses on 'the long term interests of consumers of electricity'.

Notwithstanding the above, as part of the next price review process it may be appropriate for the AER, in conjunction with the Victorian DNSPs, to investigate whether the remaining written down value of metering assets deployed as part of the AMI rollout should be recovered over a timeframe more consistent with the competitive metering market.

#### 4.2 Promote competition that improves overall economic efficiency

The second criterion focuses on ensuring the methodology for establishing the exit fee considers the impact the exit fee price signal will have on the promotion of competition, and overall economic efficiency. In particular, it seeks to ensure the benefits of competition (which in theory will flow exclusively to individual customers as a result of their individual decision to change metering coordinators) exceed any costs imposed on other participants and consumers in the electricity industry.

The proposed competitive arrangements should result in customers only changing metering coordinators where there are net economic benefits to each counterparty. The Victorian DNSPs, however, consider there is a risk when a customer changes their metering coordinator. All else equal, this churn may impose an additional cost on other participants in the electricity industry not captured in the offer to the individual customer.

Examples of where higher distribution tariffs, and therefore higher electricity bills for all distribution customers, may occur include:

- Where the terms on which metering coordinators were prepared to provide DNSPs with access to existing network functionality (data and services) exceeded the incremental costs the incumbent DNSP would have incurred had they retained their existing processes and systems.
- If as a result of the changed competitive arrangements, DNSPs had to incur additional costs in dealing with issues such as:
  - incurring costs related to meter replacement interface requirements for new metering coordinators;

- incurring costs to create or expand interfaces to be able to receive metering data from multiple metering coordinators;
- management of complex meter churn processes, meter control and part day data issues at higher volumes, including increasing the level of automation in processes which have significant manual intervention; or
- having to adopt new, less efficient processes for resolving outages that are meter faults (e.g. when a DNSP attends a fault, but the customer has a meter other than a DNSPs meter).
- Where a DNSPs ability to accrue broader network benefits was impinged due to the inability to negotiate fair and reasonable terms and conditions with a metering coordinator for new customers. These broader benefits may impact other service offerings ability to:
  - undertake better network planning, and therefore reduce network costs;
  - manage the timers on load control circuits to spread the energisation of these loads over a longer period, which reduces demands on the network;
  - use AMI data at a premise level to advise customers on supply issues and avoid wasted truck visits; and
  - use AMI data at a premise level to facilitate more effective use of fault crews by directing them to critical network points.

Unless all of the incremental benefits and incremental costs associated with a customer switching metering coordinators are borne by the counterparties to that transaction, competition may impose a net cost on electricity consumers. This is despite individual customers benefiting (both in the short term and long term) from either switching, or the threat of switching, metering coordinators. This has implications from an equity perspective (e.g. that non—churn customers should be no worse off as a result of customer churn). It is also contrary to the requirements of the National Electricity Objective (NEO), as it would lead to a diminishment in overall economic efficiency in the provision of electricity services.

Therefore, the Victorian DNSPs consider any criteria adopted should give weight to the concept that competition is an enabler to improve economic efficiency. The criterion should explicitly guide the AER to set the exit fee to promote competition only where the benefits to an individual customer switching metering coordinators are greater than any costs imposed on other participants in the electricity industry of that customer switching metering coordinators.

In practice, if there was no additional cost imposed on any other participant in the electricity industry as a result of a customer switching metering coordinators, the AER would simply calculate an exit fee that reflects the unrecovered value of the meter (as well as the reasonable costs associated with transferring the customer to another metering coordinator). If, however, there are additional costs imposed on other participants in the electricity industry, then the addition of this criterion would explicitly require the AER to consider these costs in its assessment of the proposed exit fee.

In summary, the Victorian DNSPs consider that in order for competition to promote outcomes that are consistent with the NEO, any additional economic cost imposed on other participants in the electricity industry as a result of a customer's decision to change metering coordinators should be signalled to the market at the time at which a potential new entrant is seeking to enter that market (i.e. through the exit fee). Metering coordinators would then only enter into the market if the net benefits to the two counterparties to the transaction, exceeded the cost to the broader industry.

#### 4.3 SCER's proposed criteria

The Victorian DNSPs consider the two aforementioned criteria should be augmented by establishing a number of other supporting criteria. For the purposes of this response, the Victorian DNSPs have built upon SCER's proposed criteria, rather than starting from a blank canvas.

#### The fee must be reasonable:

As outlined in section 4.1 and 4.2, the Victorian DNSPs consider the exit fee should be based on the unrecovered cost of the meter, in addition to any costs imposed on other electricity industry participants resulting from a customer transferring to another metering coordinator. These two criteria should result in an exit fee that, by definition, is reasonable.

However, if the Commission is inclined to adopt the criteria outlined in its consultation paper, the Victorian DNSPs propose this be amended to 'fair and reasonable'. The inclusion of the term 'fair', in conjunction with 'reasonable' (which is the term currently used by SCER), assists in clarifying that the AER, where it has discretion under the NEL and the NER, should place equal weight on the rights of all electricity market participants.

In this context, the imposition of an (arbitrarily derived) monetary cap on exit fees would be likely to conflict with a 'fair and reasonable' outcome. <sup>12</sup> Any cap is by

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Although somewhat unclear in the consultation paper, the Victorian DNSPs assume that as proposed by the AEMC, distributor costs above the cap would be smeared across all other customers. Hence, full recovery is still achieved for the DNSP.

definition asymmetric. Therefore, it effectively places more weight on the interests of new entrants, ahead of incumbent meter owners or their broader customer base. Although such an approach may encourage smart meters being installed in other states, it is not economically efficient in the existing Victorian metering arrangements.

If, on the other hand, the cap is 'calculated' based on certain underlying principles, and those principles are consistent with the NEO, those principles should themselves be reflected in the criteria for calculating the exit fee. A principles based methodology also has the advantage of allowing any cap to reflect the different circumstances prevailing in different jurisdictions.

#### Basing the fee on the average depreciated value of the stock of the distribution business's existing meters:

The Victorian DNSPs consider the criteria for determining the unrecovered value of a meter should provide the AER with flexibility to adopt alternative approaches. These alternative approaches may include:

- (1) The calculation of the unrecovered value of a meter is based on the year in which the asset in question was installed. While the majority of smart meters have been installed over a period of approximately 4–5 years, their asset life (approximately 15 years) means relatively large variations in written down values exist between the earliest and latest installations. This approach, therefore, may increase allocative efficiency losses from metering coordinators responding to an 'average' price signal (e.g. replacing those assets either too early or too late). A more 'accurate' calculation of this value would, all else equal, incentivise metering coordinators to compete for customers' whose meters are at, or approaching the end, of their useful life
- (2) The calculation of the unrecovered value of a meter is based on the average depreciated value. In particular, this approach may be preferable where the AER concludes the administrative costs of an alternative approach would be so large as to negate the additional allocative efficiency benefits promoted by determining a more 'accurate' exit fee.
- The exit fee should include the efficient and reasonable costs associated with transferring customers to another metering coordinator:

The Victorian DNSPs support the inclusion of this criterion.

Where a meter is installed that is not compliant with the new and replacement policy and minimum functionality required by that jurisdiction, exit fees would not apply:

The Victorian DNSPs do not support this criterion in its current form. As drafted, a smart meter which is not compliant with the current new and replacement policy may not attract an exit fee (irrespective of whether it was compliant with the policy which was current when the meter was installed). This potentially allocates technology risk to an incumbent business, even where that business has made an investment consistent with the required standards at the time. The Victorian DNSPs consider the current wording, which would appear to cover all instances of non-compliance, is not an appropriate allocation of risk. It is not, therefore, consistent with the NEO.

#### 4.4 Application of criteria to meters installed under the AMI program

The Victorian DNSPs observe that SCER's stated criteria only apply to accumulation and manually read interval meters. <sup>13</sup> It would appear, however, SCER envisaged exit fees for AMI meters may also be established and assessed under these same criteria.

The Victorian DNSPs recognise the broad principles behind these criteria are generally applicable. However, in the Victorian regime—where it is generally accepted that new and replacement meters will be smart meters—the concept of not installing a smart meter does not arise. Further, new and replacement specifications may change. Hence, any clarification should recognise that compliance with new and replacement specifications apply at the time of installation of the meter being replaced.

There are two broad solutions for overcoming this apparent disconnect. The first would be to apply separate criteria to accumulation and manually read interval meters, and meters installed under the Victorian AMI program. The second would be to expand the current criteria so one holistic criteria applied to all relevant meter types (e.g. accumulation and manually read interval meters, as well as meters installed under the Victorian AMI program).

The Victorian DNSPs' preference is to adopt the latter.<sup>14</sup> In a practical sense, this requires the reference to accumulation and manually read interval meters to be explicitly widened to also incorporate meters installed under the Victorian AMI program. This would confirm that an exit fee is eligible to be levied by a Victorian DNSP on any AMI metering installation replaced

A single set of criteria, however, may still retain some flexibility to take account of the different circumstances and technology underpinning the mandated rollout of smart meters in Victoria versus those faced by DNSPs in other jurisdictions.

The criteria, as documented, cannot be applied to AMI meters as the references to meter type are very specific. AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney, pp. 51–52.

by a retailer or consumer, and that the AER should use this criteria to assess that regulated exit fee (subject to the requirements of the CROIC, which are applicable until 2020).

#### 5 Market power of the metering coordinator

This section considers the role of the metering coordinator, as proposed by the Commission in its consultation paper. The Victorian DNSPs consider the case has not been made for introducing the metering coordinator role, as discussed in the ENA's submission.

Notwithstanding the above, this section discusses two key issues:

- The local DNSP, and not the retailer, should be the 'default' metering coordinator; and
- A local DNSP's monopsony power will be far outweighed by the metering coordinator's monopoly power.

#### **5.1** Default metering coordinator

Under the approach outlined in the Commission's consultation paper, the retailer would be the 'default' metering coordinator where a consumer does not elect to contract directly for the services of a metering coordinator.<sup>15</sup> For the following reasons, the Victorian DNSPs consider the long term interests of consumers will be better served if the local DNSP is the 'default' metering coordinator:

#### Potential diminishment in competition:

Retailers are likely to have their own metering coordinator businesses (whether ring–fenced or not). Given the proposed model accords them the 'default' position as the responsible party for engaging a metering coordinator on a consumer's behalf, this may put them in a more favourable position, relative to other competing metering coordinators and smaller, second tier (or new entrant) retailers.

Whilst the Victorian DNSPs acknowledge this outcome may occur no matter which party has the dual function of decision—maker and metering coordinator, the potential impact on economic efficiency may be magnified in the case of retailers. For example, retailers may use their default metering coordinator role (and its proposed rate structure, including exit fees) to reduce churn for retail electricity services. This may occur if customers *perceive* metering and retail electricity products to be complementary (or tied) to each other. This is particularly pertinent if those customers not electing a metering coordinator upon connection are passive consumers of electricity services (which is likely demonstrated through their non-selection of a metering coordinator in the first place); are disadvantaged; or are unable

Notwithstanding the fact that the choice in metering services and technology is *not* actually tied to the retailer or retail energy charges.

AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney, p. 32.

to understand the complexities of the metering (and retail) market services being provided. In these circumstances, there may be a greater 'opportunity' for retailers to use their default position to enhance their competitive positions in both the retail and metering services markets in the long term, to the detriment of economic efficiency.

Following from the above, allocating the default responsibility to the local DNSP would protect customers, by ensuring the default provider has nothing to gain commercially (outside of the provision of metering coordinator services themselves). Depending on how metering competition develops, continued regulatory oversight of DNSP's metering charges may be warranted (particularly if competition is slow in developing, and DNSPs retain a large market share). This may provide further protection to customers (analogous to a 'standing offer' tariff for retail services).

## Least cost transition without compromising efficiency benefits accruing from competition:

The proposed approach would represent a smooth transition to the new competitive framework, as it effectively retains the existing roles and responsibilities (whereby the local DNSP fulfils the responsible person role for most new connections). This should simplify the arrangements for consumers that do not choose to appoint a metering coordinator on connection, as well as for all other industry participants. All else equal, providing the local DNSP responsibility as the 'default' metering coordinator will also lead to reduced overall costs to customers (relative to the providing retailers with the default responsibility). In general, this reflects the benefits from economies of scope that occur when a DNSP makes a single site visit to both install and connect meters. Detailed examples of these costs are provided in appendix C.

Further, the Victorian DNSPs consider that allocating this responsibility to the local DNSP would not compromise the efficiency benefits achieved by enhancing competition in metering related services. This is because consumers seeking to procure energy management services (which are likely to be the largest driver of benefits, particularly in Victoria where network benefits are already being achieved) are also those most likely to engage a second contract for metering services.

Quite simply, those consumers that will benefit from competition (and who drive improvements in overall economic efficiency), are not likely to be the type of customer that simply reverts to the default metering coordinator, without investigating competing market offers.

#### 5.2 Monopoly status of the metering coordinator

In its Framework for open access and communication standards review, the Commission stated that where consumers have a choice of appointing a metering coordinator,

distribution businesses should negotiate and pay for access to smart meter functionality on a commercial basis.<sup>17</sup> In forming this conclusion, it appears the Commission considered any monopoly power of the metering coordinator would be offset by the local DNSP being the only buyer of these services.<sup>18</sup>

On balance, the Victorian DNSPs agree with much of the discussion outlined by the Commission in its open access report, but question its final conclusion—that the monopoly power of the metering coordinator is likely to be countervailed by the monopsony power of the distribution business.

In particular, in the commercial negotiations that may occur under the proposed framework, a Victorian DNSP's monopsony power would be far outweighed by the monopoly power able to be exerted by the metering coordinator. This results because the opportunity cost to the distribution business of not being able to obtain access to the data and services enabled by the smart meter significantly exceeds the opportunity cost to the metering coordinator of not being able to negotiate with the network business for the provision of that data and services.

More specifically, the Victorian DNSPs consider that:

Economic cost borne by the Victorian DNSPs' customers if DNSPs are not able to obtain access to smart meter functionality in the future is likely to be material:

As outlined in appendix B, the most recent cost—benefit analysis into the AMI rollout attributed nearly 30 per cent of the benefits (or over \$733 million in NPV terms) to 'benefits derived from efficiencies in network operations'. Therefore, by any measure, the value of the network benefits attributable to the existing meter functionality is substantial. If this was even remotely reflective of the value attributable to any new functionality enabled in smart meters in the future, this would clearly result in the distribution business' willingness to pay to achieve those network benefits being material. All else equal, this reduces the monopsony power that a distribution business has in any negotiations with the monopoly metering coordinator.

• Incremental cost of a distribution business' next best alternative to providing the benefits attributable to that meter functionality is likely to be significant:

The Victorian DNSPs could feasibly revert to a physical solution to retain existing benefits, or to achieve new benefits equivalent to new smart meter functionality, if

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AEMC 2014, Framework for open access and common communication standards, Report, 31 March 2014, Sydney, p. iii.

<sup>&</sup>lt;sup>18</sup> Ibid. p. 52

Deloitte, Advanced metering infrastructure cost benefit analysis, Final report for Department of Treasury and Finance, 2 August 2011, p. 8.

they were unable to negotiate reasonable terms and conditions with the metering coordinator. However, this may take the form of an expensive retrofit to their networks, and/or the retention of their existing AMI meter as a network device, such that it operates as a network (SCADA) device. All else equal, this comes with a large opportunity cost, which again reduces the countervailing monopsony power that a distribution business might have in any negotiations with the monopoly metering coordinator; and

• Incremental cost incurred by the metering coordinator in providing additional services to distribution businesses is likely to be small, relative to the two aforementioned costs:

As the Commission noted, the incremental cost of adding functionality into a meter at the production stage is relatively low.<sup>20</sup> Whilst communication and back–office functions will add to these costs, evidence from the AMI rollout indicates these will not be the material drivers of the overall cost of any rollout program. All else equal, this relatively low cost would enhance the metering coordinator's ability to exercise market power when negotiating terms and conditions with distribution businesses for access to the network functionality (including data and services) enabled by smart meters.

Overall, the Victorian DNSPs consider a by—product of the proposed approach to calculating the exit fee (see section 4) would be to neutralise any monopoly power held by the metering coordinator for the provision of data and services that currently exist in the incumbent meter. In combination with the determination of the roles and responsibilities of all relevant stakeholders (which seek to avoid non—reversion of services), the Victorian DNSPs consider this will facilitate a robust competitive framework for metering and related services.

Under SCER's proposal, however, there is a risk metering coordinators may exercise monopoly power in their negotiations with DNSPs with regards to any new functionality within meters installed as a replacement to an existing AMI meter. For example, the metering coordinator would be in a position to attain monopoly rents for the gap between the cost of providing the functionality and the value of the functionality to consumers (which, as outlined above, is likely to be material). A consequence of SCER's proposed approach, therefore, may be the following:

To adopt some form of light—handed regulation of metering coordinators' terms and conditions of access to the new meter functionality (including data and services) enabled in new smart meters. This would ensure the benefits of smart meter data and services can be accessed by all parties at an efficient cost, whilst still providing

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AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney, p. 59.

metering coordinators with the motivation to seek out functionality whose benefits flow to all customers rather than to the individual customer;<sup>21</sup> or

To provide the distribution business with the right to retain its existing meter as a network device at the connection site for network management purposes.<sup>22</sup> To be clear, this would be subject to being able to justify the capital expenditure is consistent with the broader requirements of Chapter 6 of the National Electricity Rules, as they pertain to the assessment of standard control services.

It is noted the value of the current and envisaged benefits of smart meter data and services may also be threatened if new metering coordinators providing services to new customers (i.e. those that have never been provided with a meter by a Victorian distribution business as part of the AMI program) are free to negotiate with distribution businesses for access to the functionality enabled by the smart meter. This may also apply to customers who have swapped metering coordinators twice, if this circumvents the need for the second metering coordinator to provide DNSPs access to the existing functionality of the meter. This has the potential to prevent the continuity of any distributor—customer specific contracts for demand side or other services. Again, in these cases, some form of light—handed regulation may be required.

This would also include metering coordinators considering the efficient level of density and timeliness of data that is required for distribution businesses to obtain certain benefits.

It could also involve the DNSP proposing as part of its forecast capital expenditure program to install an alternative asset either at the same or another location to provide the same functionality at lesser cost.

## A Appendix: Answers to questions raised in the consultation paper

This appendix sets out the Victorian DNSPs direct response to a selection of questions in the Commission's consultation paper.

Table 1 Answers to questions raised in the Consultation Paper

Question	The Victorian DNSP's response
16. Should the AER have a role in determining exit fees for accumulation and manually read interval meters?	The Victorian DNSP's consider the AER should have a role in determining exit fees for accumulation and manually read interval meters, including meters installed under the AMI program in Victoria.  The AER would necessarily need to fulfil this role until such a time as competition has fully developed, and can be relied upon to promote economically efficient outcomes.
17. If so, are SCER's proposed criteria for determining exit fees appropriate, and should a cap on fees be considered?	No. As discussed in the main section of this response, the Victorian DNSP's consider SCER's proposed criteria could better reflect the specific circumstances facing Victorian DNSPs. This would ensure greater alignment with the achievement of the National Electricity Objective.  A cap may be an outcome applicable to the removal of barriers to smart meter installations in other jurisdictions.
23. Should there be arrangements that allow for jurisdictions to determine their own new and replacement polices or should all new and replacements meet a common minimum functionality specification?	It is important the benefits smart meters already deliver to Victorian electricity consumers be continued into the future, unless this outcome is clearly inconsistent with the delivery of economically efficient outcomes. In this context, jurisdictions should be able to determine their own new and replacement policies. This allows different jurisdictions to mould the minimum functional specifications that apply in their jurisdiction such that they maximise the economic benefits that accrue to electricity customers in their jurisdiction. This acknowledges that not all customer needs are the same, with customers in different jurisdictions potentially placing different values on different smart meter functionality.  It also mitigates the risk that 'the lowest common denominator' minimum common specification is adopted—which is of particular concern for the Victorian DNSPs, given that they are starting from the most advanced position (with regards to smart meter functionality).  The Victorian DNSPs consider the new and replacement policy in Victoria should be the Victorian minimum functionality specification. Alternatively, a national functionality specification may apply where this offers the same or higher functionality, and can be achieved within Victorian DNSP smart meters at a relatively low cost.

24. Is it appropriate that the Victorian distribution network businesses would become the metering coordinator for the smart meters they have deployed?

Yes. The Victorian DNSPs consider it is appropriate for Victorian DNSPs to become the metering coordinator for the smart meters they have deployed under the AMI program.

25. Should an exclusivity arrangement be put in place to allow Victorian distribution network businesses to continue in the metering coordinator role for a specified period of time? If so, should this be determined by the Victorian Government or defined in the NER?

Yes. The Victorian DNSPs consider an exclusivity arrangement should be put in place, and be determined by the Victorian government.

The exclusivity period should be managed by the Victorian government in a Victorian instrument, as this allows the Victorian government flexibility for the transition timing and communication to consumers. It also ensures that benefits realised in Victoria in the interim are able to be catered for in the national framework. This is consistent with the broad approach in the AEMC model that the exclusivity arrangements across all metering types and situations be determined by the jurisdiction.

The Victorian derogation was extended in 2013 to allow for the development, as part of the national smart meter process, of the necessary arrangements for:

- connection and energisation processes;
- management of life support customers;
- notification of customer energisation status;
- near real time access of network data; and
- unique identification of AMI or smart meters in the NEM.

These matters need to be clarified within the current regulatory framework—including amendments to NER, AEMO procedures, NECF and Victorian regulatory instruments. Given the penetration of advanced metering, it is also important that switching of customer loads in a localised area, which may impact the operation and security of the network, be considered and appropriately managed.

The current Victorian derogation that allows distributors exclusive right to install AMI meters (where customers consume below 160 MWh per annum) expires at the end of 2016, or earlier if national arrangements are established and in place for smart meters. At present, there is no clear program to establish a national smart meter framework. We consider there is a significant risk the national framework will not be in place to meet the current derogation end date. The Victorian DNSPs consider the current exclusivity arrangement should continue until there is a national smart meter framework, and clear transitional arrangements in place and implemented in Victoria.

26. Should Victoria's local distribution network business be required to take on the metering coordinator role as a ring fenced entity after the exclusivity period has ended?

The Victorian DNSPs consider they should not be required to take on the metering coordinator role as a ring fenced entity after the exclusivity period has ended. DNSPs already have in place financial ring fencing, namely the cost allocation methodology (CAM) which is approved by the AER. It ensures costs are correctly allocated for each of the distribution services classified by the AER. If necessary, financial ring fencing of a distribution network metering business can be explicitly clarified in the CAM.

Any concern that Victorian DNSPs may have an unfair advantage over competitive metering coordinators can be eliminated by requiring the network businesses to inform customers at the time a connection offer is made to a customer that choice of metering coordinators is available.

The Victorian DNSPs consider there is not a need for further ring fencing (such as legal or operational separation) to ensure a 'level playing field' for competitive metering services. The separation of legal or operational systems within distribution businesses is of no value when most of the services being provided are clearly inward looking. For example, dynamic meter status, outage notification, voltage data, and supply capacity control support clear network functions and requirements.

30. Are there any other systems, procedures or guidelines that might need to be amended to support competition in metering and related services?

Most likely yes, but it is difficult to provide any detail until the framework and detailed policy positions are clarified. The likely rule and procedural changes across the NER and NERR frameworks to accommodate energy and network services will take time to develop, build and test.

#### B Appendix: Background to the Victorian AMI rollout

In 2004, the Victorian Essential Services Commission mandated the rollout of manually read interval meters throughout Victoria—the Interval Meter Rollout (**IMRO**) program.

In 2005, in view of developments in metering technology and the possibility that the IMRO decision could be expanded to deliver greater benefits to customers, the then Department of Infrastructure, together with the electricity distributors and retailers, commissioned a cost—benefit analysis (CBA) to examine the net societal benefits of adding advanced functionality to the IMRO mandate. As a result of this CBA, an amendment to the Electricity Industry Act 2000 was passed in 2006 providing the Government with legislative heads of power to make Orders—in—Council (OIC) establishing mandated requirements for the deployment of AMI.

The Victorian distributors commenced rolling out AMI meters and communications and IT infrastructure as part of the mandated AMI program in late 2009. At the time of writing, over 90 per cent of all eligible customers, now have an AMI meter. These meters must conform to minimum functionality and performance levels for the AMI systems across the following elements:

- Meter configurations
- Remote and local reading of meters
- Supply disconnect and reconnect
- Time clock synchronisation
- Load control
- Meter loss of supply detection and outage detection
- Quality of supply and other event recording
- Supply capacity control
- Interface to the home area network (HAN).

In 2011, the Victorian Government undertook a holistic review of the AMI program. One component of this review was to seek an independent reassessment of the costs and benefits of the AMI program. The comprehensive CBA undertaken by Deloitte concluded that, amongst other things, given the progress of the rollout up until that point, continuing the AMI program from 2012 would result in net benefits to customers of \$713 million (NPV

at 2012).<sup>23</sup> Of particular relevance was that Deloitte found that the 'benefits derived from efficiencies in network operations' was the second largest contributor to the overall benefits case at \$733 million (~29 per cent of total benefits).<sup>24</sup>

At a practical level, a number of these network benefits have already been implemented. The following table provides examples of the network and customer service initiatives being undertaken by the Victorian DNSPs using AMI data.

Table 2 Examples of network and customer service initiatives using AMI data

AMI functionality	Network/customer benefit
Data collection by 6AM the following	AMI meters allow data to be collected earlier and with greater completeness than the National Electricity Rules (NER).
morning	Victorian DNSPs use aggregated AMI meter data to analyse loading at the high voltage, distribution transformer, and low voltage circuit level. This analysis can provide early warning of excessive loading on circuit elements, which can enable prioritisation of replacement and upgrade works. This can reduce network costs due to degradation or failure of network assets, and avoid the customer outages associated with asset failures. In a heat wave or other extreme weather event, availability of data by 6 am the following day enables immediate analysis of current loading conditions to identify potential failure points if conditions persist the following day.
	Early data availability (through web portals and in-home devices) also enables customers to observe the impact of their consumption decisions and to change behaviour where appropriate. For example, consumption and costs on a hot day can be used by the customer to modify their usage the next day if this is also hot.
Remote load control commands	Victorian DNSPs use AMI meters to switch on load control circuits directly, and to manage the timers that control those circuits. The AMI meter also provides the capability to spread the switching of these loads over a period. This new capability enables distributors to respond to changes in loading patterns on particular feeders or substations to maintain network balance.
Meter loss of supply and outage detection	A number of the Victorian DNSP fault centres and control rooms are piloting the use of near-real-time AMI data including 'meter off supply' (last gasp) and 'meter on supply' messages after outages. This provides restoration crews with precise data on the location and extent of faults on the network within minutes.
	AMI data enables the Victorian DNSPs to initiate fault responses

Deloitte, Advanced metering infrastructure cost benefit analysis, Final report for Department of Treasury and Finance, 2 August 2011, p. 8.

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The largest contributor was the benefit attributable to the avoidance of costs associated with both replacing and reading accumulation meters resulting from the AMI program.

significantly earlier. The data also facilitates more effective use of fault crews by directing them to critical network points. Where complicated or multiple faults involve the operation of several protective devices, AMI data provides the fault centre with evidence that all affected parts of the network have been returned to service before fault crews leave the area. Immediate sending Other alarms and events are now being used in network operation in a of alarms and similar manner to the AMI 'loss of supply' messages detailed above. events/status This will include events such as: changes Over Temperature Alarm; Over/Under Voltage – compliance breach; Tamper Detection; Neutral integrity of connections at a premise level; Confirmations of Issued Commands actioned (such as confirming disconnection); Load contactor switching; and Tripping due to 'Emergency supply capacity limiting'. Having this data available in near-real-time allows network controllers to maintain balance and power quality. On-demand provision The Victorian DNSPs' contact centres can determine a customer's meter of events and status supply contactor status whilst the customer is still on the call. This information improves customer service as it reduces the supply fault validation time and enables the provision of more accurate and faster advice regarding customer side faults. This enables earlier engagement of a Registered Electrical Contractor by the customer where necessary, as well as reduction in wasted truck visits.

#### C Appendix: Costs of retailer as 'default' metering coordinator

As outlined in section 5.1, the Victorian DNSPs consider that providing the local DNSP responsibility as the 'default' metering coordinator will lead to reduced overall costs to customers. For example:

- Customers currently benefit from economies of scope that occur when the DNSP makes a single site visit to both install and connect meters. Under the approach outlined in the consultation paper, connection services may require multiple parties visiting a site, including multiple DNSP visits.
- Where a DNSP attends a fault, restoration of supply may be delayed if the meter needs replacing (but the meter is not owned by the DNSP).
- Customers may receive reduced services or increased costs where they seek restoration of supply and the distributor is unaware whether a third party has remotely de-energised the meter. In these circumstances, the customer will need to decide whether the DNSP dispatches a truck (which may be wasted, or require the DNSP to install a temporary meter), or whether they contact their meter coordinator. If a temporary meter is installed, significant meter set—up and registration costs will be incurred, such as reading the meter for a few days, managing part day data, and meter asset control on return.
- To effect supply restoration for a life support customer, the only opportunity may be to install a distributor meter (if the third party meter is causing the supply issue).

In the case of meter churn, customers may face additional costs due to the meter itself, and/or the meter data. For example:

- If the DNSPs meter is not returned in a timely manner, or returned to another DNSP, there will be increased costs associated with meter control and follow up with third parties.
- Missing data in the MSATS meter register may mean the meter cannot be set up in our systems to receive data for network billing. Similarly, alternative meter configurations may be unable to be supported in the DNSPs meter data and billing systems.
- The DNSP may establish a testing program for a meter family, but face wasted site visit costs where these meters have churned out after work is scheduled and customers have been notified.