
21 May 2015

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

Dear Mr Pierce,

RE: DRAFT RULE DETERMINATION – COMPETITION IN METERING AND RELATED SERVICES

CitiPower and Powercor Australia, United Energy, AusNet Services and Jemena Electricity Networks (**Victorian DNSPs**) welcome the opportunity to respond to the Australian Energy Market Commission's (**AEMC**) draft rule determination released on 26 March 2015.

This Victorian DNSPs response focuses on the following key issues:

- Measures necessary to preserve and promote the realisation of smart meter benefits in Victoria including:
  - maintaining the minimum AMI specification by enabling a jurisdiction to determine locational specific minimum services/functionality;
  - enabling the network device to be broadly used to enable the full range of network benefits;
  - ensuring access to data and services commensurate with that already provided/supplied by DNSPs;
  - providing transitional arrangements specific to Victoria; and
  - ensuring cost recovery is provided to Victorian DNSPs for metering investments made prior to the introduction of contestability.
- Measures required to ensure workability of the introduction of contestability across the NEM, including:
  - making the Retailer-MC-distributor relationship work;
  - workable implementation arrangements;
  - guidance for procedure and protocol development, and service delivery;
  - ensuring appropriate governance arrangements;
  - appropriate ring fencing arrangements; and
  - consumer protections.

In particular we do not wish to see the current and future benefits from Victoria's AMI infrastructure inadvertently undermined resulting in an overall lower set of benefits and choices for our customers.

The DNSPs would welcome the opportunity to meet with you to discuss the issues raised in this submission.

If you have any queries regarding this submission please do not hesitate to contact anyone of the following:

- Renate Tirpcou, CitiPower and Powercor Australia on (03) 9683 4082;
- Siva Moorthy, Jemena Electricity Networks on (03) 8544 9442;
- Verity Watson, United Energy on (03) 8846 9856;
- Peter Ellis, AusNet Services on (03) 9695 6629.

Yours sincerely,

Renate Tirpcou Manager Regulation, CitiPower and Powercor Australia

on behalf of the Victorian Electricity Distribution Businesses


# Joint response to the Australian Energy Market Commission's Draft Determination on expanding competition in metering and related services

21 May 2015

## Contents

# Executive Summary

The Victorian DNSPs acknowledge the Council of Australian Governments (**COAG**) policy decision where there is a clear benefits case that metering services should be provided on a contestable basis. We understand that the key objective of meter contestability is to promote the roll out of smart meters across the National Electricity Market (**NEM**) to provide long term benefits to consumers in the form of opportunities for demand-side management, tariff reforms and improved network management leading to reduced costs.

The AEMC acknowledges that this is a fundamental reform, which is closely linked to many related Power of Choice reforms. The Victorian DNSPs appreciate the consultation efforts to date by the AEMC. However, there are a range of refinements to be made to the Rules to better promote the desired policy outcomes and long-term interests of customers.

The application of competition policy to Australia's energy markets has positively affected the choices and prices paid by customers for energy services and we support the AEMC's vision for metering reforms that emphasise consumer choice and the development of a competitive energy services market.[1]

However, there are a number of dimensions to promoting the long term interest of consumers. The long term interest of consumers is also promoted by leveraging the long term efficiency of energy networks including the economies of scale and scope energy networks can provide to customers. Leveraging these benefits requires DNSP access to new network control and management service technologies that encourage network businesses to participate and innovate in these newly contestable markets to deliver improved customer outcomes through enhanced network operation and innovative customer focussed offerings. For these reasons, we encourage the AEMC to make refinements to a number of aspects of its draft determination that recognise that long term customer interests will be maximised by coordinated decisions on the full range of metering services that support both increased customer choice *and* more efficient network services.

It is important that the policy position and rule amendments are developed in light of the progress already made in Victoria. In Victoria, the smart meter roll out has largely been completed. Approximately 2.8 million meters have already been deployed to Victorian homes and small business involving significant investment on behalf of Victorian customers. The Victorian roll out represents 25 per cent of residential and small businesses in the NEM and therefore significant progress has already been achieved for a material share of the market customer base.

Therefore, in Victoria, the policy objective should be to ensure realisation of benefits to consumers (rather than to promote a timely rollout). This is achieved through consumer opportunities to participate in demand-side management driven by access to a range of advanced smart meter services, and through opportunities for more efficient network operations leading to reduced network charges and improvements in reliability and quality of supply. Given that Victorian customers have already made the significant investment required to enable future network-related benefits to be realised from smart meters, we consider it essential that these benefits are delivered to Victorian customers and are not deferred or undermined.

[1] Speech by John Pierce, AEMC Chair, Energy Networks Association Forum, 7 May 2015.

This submission therefore proposes changes to the draft rule to better promote the realisation of smart meter derived benefits in Victoria, while still promoting the effective roll out of smart meters nationally. Key aspects of our submission are:

- Measures necessary to preserve and promote the realisation of smart meter benefits in Victoria including:
  - maintaining the minimum AMI specification by allowing locational specific minimum services/functionality;
  - ensuring access to data and services commensurate with that already provided/supplied by DNSPs;
  - enabling the network device to be broadly used to enable a full range of network benefits and hence be a credible bypass mechanism;
  - providing transitional arrangements specific to Victoria; and
  - ensuring cost recovery is provided to Victorian DNSPs for metering investments made prior to the introduction of contestability.
- Measures required to ensure workability of the introduction of contestability across the NEM, including:
  - making the Retailer-MC-distributor relationship work;
  - workable implementation arrangements, including independent program management and realistic work program before setting the implementation date;
  - guidance for procedure and protocol development, and service delivery;
  - ensuring appropriate governance arrangements;
  - appropriate ring fencing arrangements; and
  - commensurate consumer protections.

A number of other matters of concern to the Victorian DNSPs are covered in the ENA submission and are therefore not repeated in this submission, including:

- the ability of the networks to meet their statutory and regulatory obligations under the National Energy Retail Law (**NERL**) (or equivalent Victorian framework) due to proposed changes in the metering draft determination
- the ability of networks to access network services from Metering Coordinators (**MCs**) in the absence of regulatory support.

In the short time allowed for consultation on these draft rules, the Victorian DNSPs have found several examples of fundamental flaws, areas of ambiguity, or inconsistencies that call into question the workability of the rules as drafted.

We submit that unless carefully and systematically tested by appropriately skilled multi-disciplinary working groups, to overcome the drafting issues identified by the Victorian DNSPs and any others, the new rules will fail the AEMC's own assessment criteria of transparency and predictability: the market will not have confidence that the regulatory framework has roles and responsibilities that are clearly defined, and parties, including consumers, have sufficient information to make decisions.

That confidence would be further undermined if crucial decisions (notably, decisions to be enshrined in many new or amended protocols, procedures and guidance instruments) are to be made by entities that may not be best placed to make them. The detailed decisions, when developed, will affect administrative burdens and transaction costs.

## Overview of specific requests

We acknowledge that competition in metering will happen, with a target date set to drive industry to deliver. The complexity and interdependencies are acknowledged, though not all fully understood.

The Victorian DNSPs have therefore strived to identify the minimum changes required to the reform approach, the AEMC's draft determination and draft rules, to ensure that the competitive metering reform outcomes can be achieved *without* unintended adverse consequences.

To achieve a safe and seamless transition for Victorian customers and an effective and efficient outcome for all stakeholders, the five Victorian DNSPs recommend that the following measures are required.

**To consider a more flexible approach to minimum services and functionality**

1. Where there is a clear case for higher meter functionality (i.e. incorporating secondary or value added services), allow a jurisdiction to approve a location-specific services/functionality specification that must be met by all parties in that location;

**To make the network device concept work as intended**

2. Change the definition of network device to ensure that the concept and purpose is clear and technically correct, and not subject to potential misunderstanding;
3. Clarify that the network device is on the supply side of the MC's meter in Victoria;

**To ensure workable implementation**

4. Establish a government-endorsed reform implementation body, supported by an independent program manager, secretariat and program office (AEMO-only program management is unlikely to be adequate);
5. Develop a detailed implementation work plan to inform a realistic target start date;
6. Create new rules that enable a deferral of the effective start date by say, the COAG Energy Council, based on a readiness assessment;

**To enable data access provisions to work as intended**

7. Enshrine in the Rules principles to ensure that:
    - end use customers pay only once for base level metering data requirements through the MC-Retailer relationship;
    - metering data provision to DNSPs enables DNSPs to fulfil their regulatory obligations;

**To manage the Victorian transition**

8. Develop new National Electricity Rules (**NER** or the **Rules**) clauses that ensure cost recovery of Victorian AMI meters;
9. Grandfather Victorian installed AMI meters and associated systems as type 5;
10. Recognise and allow for the interaction with Victorian instruments, and overcome the problems created in relation to meter types and definitions. Improve transparency in the market by creating a uniquely identifiable national smart meter – type 4b;
11. Establish a collaborative approach to working through detailed issues and solutions
12. Adopt pragmatic opportunities to streamline implementation, and minimise costs for Victorian customers;

**To improve guidance for procedure and protocol development, and service delivery**

13. Bolster the guiding principles and specific content requirements for supporting protocols and procedures ;
14. Include an explicit objective to preserve customer and network benefits already enabled by the mandated Victorian AMI meter roll out;

**To ensure that technical decisions are made by the right entity**

15. Apply principles of good governance, draw on international smart metering reforms, and then carefully reconsider effective options for governance of detailed technical decisions (this may result in the creation of a new body rather than relying on Australian Energy Market Operator (**AEMO**));

**To make the retailer – metering coordinator – local network service provider relationship work:**

16. Develop a new overarching objective to guide decision makers[2] and stakeholders – the objective should be based on the National Electricity Objective (NEO), but be fit-for-purpose and effective for the new market paradigm;
17. Make a number of new rules to provide clarity around roles and responsibilities;
18. Recognise the new risks created for DNSPs by the new roles and responsibilities, and support a consequential review of relevant aspects of network regulation;

[2] Including the Australian Energy Regulator, the Australian Energy Market Operator and the Information Exchange Committee.

**To prevent unnecessary, costly operational and functional ring-fencing requirements**

19. Make the development of ring-fencing guideline discretionary, not mandatory;
20. If a ring-fencing guideline is made by the AER, provide guidance in the Rules to ensure the AER:
    - considers that ring-fencing and other regulatory interventions are not designed to remove all business advantages (including scale and scope efficiencies);
    - applies best practice regulation to ensure that in evaluating the spectrum of regulatory settings that might be applied to different competitors in the newly contestable metering market, the benefits of regulatory intervention outweigh the costs;
    - considers associated costs and benefits; and
    - doesn't lock the DNSPs out of any new market through prescriptive ring fencing arrangements;
21. Recognise the unique Victorian starting point and allow an orderly transition for compliance;

**To note significant gaps and risks for consumer protections**

22. Apply the same compliance and reporting obligations regardless of who is organising the metering;
23. Establish an appropriately skilled multi-disciplinary working group to carefully and systematically test and draft new rules, to ensure that existing customer protections are not eroded.

# 1. Allow location-based metering services and functionality

The Victorian DNSPs are concerned that the AEMC's draft determination will likely undermine the current and future benefits of the mandated Victorian AMI roll-out by only requiring the MC to ensure that their metering installations are capable of providing a limited range of smart meter services i.e. those defined in the *minimum service specification* in NER Schedule 7.5.1. This limited number of services does not include a range of additional services identified as secondary and value added service in the AEMO COAG Advice paper, which the Victorian DNSPs' consider are required in Victoria. The AEMC expects that, in practice, "most metering installations will exceed the minimum services specification because retailers, DNSPs and energy service companies will negotiate for additional services to be provided by the metering installation".[3]

The position in Victoria is that all AMI meters installed have the capability to deliver these additional services. A number of these services are being utilised, and the remainder are planned to be utilised, to provide individual or broad societal benefits for the 2.8 million customers with AMI meters.

**Overview**

The AEMC is asked to consider a more flexible approach to minimum services and functionality

Where there is a clear case for a wider range of service capabilities (i.e. higher meter functionality incorporating secondary or value added services and higher service measures) for a location, allow a jurisdiction to approve a location-specific service specification that must be met by all parties in that location.

## 1.1 AEMO Advice

AEMO recognised in its COAG Advice paper[4] (the Advice) that there is a difference in the fundamental basis and drivers of a contestable compared to a regulated rollout. AEMO's advice was that the services to be mandated in a *contestable* rollout should be limited to those notated as primary services. However it suggested that the services to be mandated in a *regulated* rollout (such as is the case in Victoria) should include, in addition to these primary services, a range of secondary services. AEMO further suggested that those services nominated as value add services should also be considered for inclusion.

Though AEMO's reasoning is not explicit, a reasonable interpretation is that where regulation mandates that customers accept a smart meter, the best customer and societal value over the life of the meter is obtained by including a rich array of standard services. It is also impossible to consider contestable metering in Victoria without due regard to the mandatory rollout which has preceded it.

[3] Pages 169 and 180 of the draft determination.
[4] AEMO, Minimum functionality of advanced meters, Advice to COAG Energy council, November 2014, p9.

The Advice did not go on to consider and recommend the services to be included in a contestable regime which follows a regulated rollout (i.e. the Victorian scenario). However, it appears reasonable, based on AEMO's modelling, that new customers receiving meters in this scenario be assured of the same array of services, and hence continue to contribute to, and not risk undermining, the societal benefits.

## 1.2 Victorian benefits at risk

Based on Victorian experience to date, achieving the benefits from value added services takes time. Even though the roll-out commenced in 2009, benefits of these additional services have only been realised in recent years. The achieved benefits, and envisaged and planned benefits, have increased in their range, and in their network and societal value. The Victorian DNSPs assess that there are many further benefits associated with service improvements to consumers, new products, improved network operations etc. which may be achieved by the Victorian AMI meters. Victorian consumers should receive the full potential of the complete range of services enabled by these meters.

Benefits may arise through consumer opportunities to participate in demand-side management, and through opportunities for more efficient network operations leading to societal benefits from reduced network charges and improvements in reliability and quality of supply. These benefits were the basis of the universal rollout of high functionality/high service level AMI meters.

The policy objective in other jurisdictions is to promote the roll out of smart metering technology to enable greater demand-side participation. We understand the AEMC's view is that a lower minimum services specification will better promote the timely and cost effective roll out of smart meters.

In Victoria however, smart meter roll out has largely been completed as a result of the government mandated roll out. Approximately 2.8 million meters have already been deployed to Victorian homes and small business involving significant investment on behalf of Victorian customers. The cost-benefit analysis for the mandated rollout of smart meters in Victoria was premised on the benefits that would result from opportunities for more efficient network operations and improvements in reliability and quality of supply. To enable network benefits to be realised, the minimum specification for smart meters rolled out in Victorian was set at a higher level than that now proposed in the AEMC draft rule.

Therefore, in Victoria, the policy objective is not to promote timely roll out, but to ensure realisation of benefits to consumers, both though consumer opportunities to participate in demand-side management and through opportunities for more efficient network operations leading to reduced network charges and improvements in reliability and quality of supply.

Further although not covered directly in the draft rules, the model presented in the AEMC papers and workshops was that standardised B2B processes and procedures (i.e. Shared Market Protocol (**SMP**)) would apply to the minimum service specification (i.e. the primary services). This concept is supported by the Victorian DNSPs and we are keen to see this supported in the forthcoming SMP Rule change. However consistent with the recommendation above that the standard services for Victoria should be based on the Victorian Functionality Specification, we consider that the concept of B2B/SMP support should extend to these services (i.e. secondary and value-add services).

## 1.3 Concerns with draft rules

We are concerned that the draft rule will undermine the realisation of network benefits to Victorian customers because:

- The minimum services specification under the draft rules is significantly lower than the Victorian minimum specification. There are a wide range of services not supported by the proposed minimum services specification. Some examples of the services and resultant benefits which would not be enabled by the lower minimum specification are:
    - **Outage alarms (last gasp):** These significantly reduce the DNSP's reliance on customer calls for network fault notification. This increases the customers' confidence in the level of control of the network and enables an early reaction to a network outage and ensures that the response is correctly targeted to the fault magnitude and location, hence reducing customer exposure to extended loss of supply.
    - **Load control of hot water**: This is a critical aspect of the operation of Victorian networks particularly for the rural networks where many customers cannot access gas HW. Unless carefully managed, these loads can constitute the peak loads on some network distribution lines and hence determine the capacity which must be provided and maintained on these lines. The Victorian DNSPs have utilised the meters inbuilt contactor to control these HW loads and, by remotely varying the time settings on the switching of these contactors, can distribute the load to ensure the line loading remains within limits. This avoids other more expensive options to ensure these distribution lines are not overloaded.
    - **Support of a utility HAN:** The concept of *Demand Response Enabling Devices* (DREDs) enables the Distributor to reach agreement with customers to allow the Distributor and customer to agree to make changes remotely to the settings of the customers' loads, notably air conditioning. This can have major benefits which it has been estimated could reduce the need for multiple millions of dollars of network distributor line and equipment augmentation. However if the remote control of these devices is not available through a reliable and high availability communication network, then there are risks in relying on these DREDs being actioned when required. Operation of these devices through a utility HAN supported by a smart meter provides the ideal communications medium.
    - **Supply capacity control** (emergency and routine): Allows the DNSP to set routine supply capacity limits in line with supply agreements and to invoke emergency (and therefore different settings) for wide-spread supply capacity rationing at the site level rather than implement wide-spread blackouts at the feeder level.
- The MC is not required to provide secondary or value-added services and there is no requirement for these services to be included in the Shared Market Protocol.
- There is uncertainty regarding whether the price an MC offers for secondary or value-add services would be cost efficient.

Importantly, the realisation of network benefits:

- Takes time to develop as the networks learn how to maximise the use of the data and services that are enabled by smart meters and make the necessary complimentary investments in systems and process. Based on Victorian experience to date, DNSPs have only over the last couple of years put in place systems and processes to utilise the smart meter services to gain network benefits even though the roll-out commenced in 2010 and was largely completed by 2013.
- Relies on access to smart meter data and services from a reasonable coverage of meters in each network location. This is particularly important in Victoria for greenfield sites where new connections would only be required to have the lower minimum specification and therefore DNSPs would not necessarily have the same level of information and visibility over the network performance in greenfield locations. Consequently, we would not be able to derive the same level of network benefits in these locations.

The Victorian DNSPs are concerned that a reversion in the minimum services required to be provided by smart meters in Victoria will:

- in the short term, lead to lower service delivery and higher costs incurred for greenfield sites in Victoria; and
- in the medium term, could lead to the loss of access to network benefits already being delivered, or planned to be delivered, to Victorian customers due to the replacement of higher specification meters with lower specification meters that do not enable network benefits to be realised. This will occur unless the DNSP continues to fund network devices and is able to use those devices effectively.

## 1.4 Recommendation

We ask the AEMC to include a mechanism in the NER to allow, where there is a clear case for higher meter service capability, a jurisdiction to approve a location-specific services specification that must be met by all MCs in that location.

This location-specific services specification could incorporate secondary or value added services, and/or higher service measures.

In Victoria, DNSPs consider there is a strong case for maintaining the current Victorian minimum specification, and hence related service capabilities.

# 2. Workability of network device provisions

The AEMC draft determination makes it clear that the intent of the Rule change is that Victorian DNSPs are permitted to retain their existing AMI Meters as "network devices" (or deploy an alternative network device) if they are unable to reach agreement with the MC at a site with respect to smart meter services access in the future.

The draft determination considers that this capability to bypass the MC meter to obtain network services will serve as an inducement for the MC to provide these services at an economically efficient price. The underlying objective was to provide an alternative source of smart meter services. These services potentially include any or all of the services in: the national minimum services specification; the list of secondary and value-add services identified in the AEMO COAG Advice; or other innovative network support services to DNSPS. The DNSPs should not be constrained in providing customers services which would have societal benefits, e.g. demand response.

The DNSPs support this concept. However, the DNSPs are concerned that the current drafting of Rule 7.8.6 and the glossary definition of *network device* do not clearly support that outcome. Further, if the network device is not on the supply side of the MC's meter in Victoria, it would render the network device, as it is conceived in the Victorian context, less effective[5].

In terms of the AEMC's assessment criteria for these rule changes,[6] these concerns affect transparency and predictability, and competition in demand response products.

**Overview**

We ask the AEMC to provide a more rigorous definition of network device, and its intended uses, to ensure that:

- the concept is clear and technically correct, and not subject to potential misunderstanding
- the AEMC's intended policy outcome is achievable

Also, we ask the AEMC to clarify that the network device would be on the supply side of the MC's meter in Victoria.

[5] The network device located on the load side will support some envisaged Victorian DNSP outcomes but as detailed in Section 2.3.2 these limited outcomes will reduce the effectiveness of the network device as a credible alternative to retailer MC provided services and hence still expose the DNSPs to outcomes of negotiations for these services from the retailer MC.

[6] These assessment criteria are described in section 2.3 at page 25 of the draft determination.

## 2.1 Agreed policy intent

The Victorian DNSPs support the AEMC Draft Determination where it states:[7]

- *The draft rule therefore allows the Victorian DNSPs to continue to use the meters they installed as part of the AMI program as a network device if they choose to do so, for example if they are unable to reach an agreement with Metering Coordinators to access equivalent services.*
- *Apart from providing the Victorian DNSPs with a bypass option, the availability of this option will allow the expected benefits of the AMI program to be realised even if the MC decides to install its own meter before the AMI meter reaches the end of its useful life.*
- *The draft rule also provides that DNSPs may install new network devices, which will provide DNSPs with a bypass option in relation to customers that do not currently have an AMI meter, e.g. greenfield sites.*

## 2.2 Changes to definition of network device

Whilst the AEMC's drafted definition broadly defines the concept of a network device, the DNSPs consider that some of the terminology can be improved to provide a more rigorous definition to ensure that the concept is clear and technically correct, and not subject to potential misunderstanding.

The Victorian DNSPs propose the following amendments to the definition:

> An item of apparatus or equipment associated with the provision or the monitoring of *network services* which may include ~~circuit breakers~~ switching devices, measurement, protection and control equipment ~~and which may be housed within a facility~~ mounted on a meter panel that was previously used by the relevant *Local Network Service Provider* as a *metering installation*, or on a new meter panel housed within the *metering installation*.

The reasons for the proposed amendments are as follows:

- Whilst the network device definition is broad, it specifically identifies circuit breakers and control equipment as typical examples. Whilst these examples include protection and load control or switching, many other services which may be sourced from a network device are associated with measurement of network parameters such as voltages, current, power factor.
- The network device could be used to isolate the customer's electrical installation for alterations and repair.
- The term "circuit breakers" is generally used for a device with load sensing and fault breaking capabilities to offer overload protection, whereas the term "switching devices" is more correctly the type of equipment used in the service envisaged.

[7] AEMC Draft Determination, p291.

- The concept of this being a 'facility' which can house a network device is ambiguous. The component of the customer's electrical installation which is allocated to metering and control equipment is the 'meter panel' – in the case of Victoria, the existing AMI meter is likely to be the network device – will be mounted on this meter panel. It is also important to ensure that the definition clearly recognises that the meter panel, which is part of the metering installation, may house non metrology equipment.

Our proposed definition more fully describes the various types of network device that are either currently in service on a meter panel or may be installed or placed in service in the future.

Further, to ensure clarity with the intended use of network devices, we propose that rule 7.8.6(a) be broadened to be consistent with our proposed amendment to the scope of the amended definition above to:

> A *Local Network Service Provider* can retain or install a *network device* associated with the provision or the monitoring of a *network service*.

Related amendments will be required in clause 7.8.6. For example, there is no need for the network device to be "at or adjacent to" the metering installation as this is dealt with in our proposed definition. Moreover, the language of "associated with the provision or the monitoring of a *network service"* is preferred to *"*for the purposes in connection with the operation or monitoring of its *network"* as the preferred drafting more closely aligns with the definition.

## 2.3 Changes to clause 7.8.6

The Victorian DNSPs are concerned that the current drafting of the new clause 7.8.6 is inconsistent with the AEMC stated policy position as it:

- restricts DNSP use of network devices for a wide range of network services enabled by the network device, as envisaged by the draft determination
- will not achieve the maximum benefits possible from the network device
- will not provide a viable bypass option to Victorian DNSPs .

By way of example, some Victorian DNSP concerns regarding the drafting are detailed below:

### 2.3.1 Using the network device for remote disconnections and reconnections

The draft clause 7.8.6 (c)(2) states that:

> *A Local Network Service Provider must not: ……..use a network device to reconnect or disconnect a metering installation via remote access.*

There are various situations in which a DNSP, unable to get satisfactory services from the MC, would seek to remotely operate its network device to disconnect or reconnect supply to a customer's premises including:

1. **Supply capacity control when the DNSP is required to switch an individual site**:
    a. under routine supply capacity control where customers have entered into agreements with the DNSP to allow temporary interruption of their supply as part of a scheme to delay the need for network augmentation; or
    b. as part of a wider network emergency supply capacity control response to shed the load of the distribution network. Depending on the circumstances this could be used as part of the initial response to the emergency, or could be used as part of rotational load shedding to manage a longer term emergency. Using this capability potentially provides the DNSP with more flexible and better choices when load shedding than is currently available. Currently, distribution feeders are completely shut down where there are sensitive loads such as hospitals. Wider use of network devices would allow DNSPs to spare customers with life support equipment from emergency load shedding. [8]
2. **In support of safety disconnection in an emergency**. Clause 7.8.6(c)(2) would limit the Victorian DNSPs from utilising their existing AMI meters to disconnect a customer's premises for safety or other reasons. For example, disconnection requests by fire, police and emergency services can be remotely performed ahead of a site visit to physically isolate perform the services described above. We believe the intention of clause 7.8.6(c)(1) is to permit the use of the network device for the operation or monitoring of the distribution network.

### 2.3.2 Disclosing information obtained from a network device to any person

The draft clause 7.8.6(c)(4) states "A Local Network Service Provider must not: ……..disclose **any** information obtained from the Network Device to **any** Person **except** as permitted in the Rules."

The Victorian DNSPs assume that this is not intended to restrict the capability of the DNSP to provide detail derived from their Network Device to the customer or other parties authorised by the customer.

[8] The proposed emergency priority procedure may not be effective as not all MC's need to provide supply capacity control or may have the capability of using that functionality. In addition the DNSP may have no contract for use of such a service and agreement on settings etc.

### 2.3.3 The location of the network device

The electrical location of the network device relative to the connection point and the MC's meter is a critical aspect of the network device providing a credible bypass option to the MC's meter for the provision of smart meter services.

This is particularly important in the Victorian jurisdiction and continued use of the existing AMI meter as a functionally rich network device to retain access to existing AMI enhanced services. This is less important where the network device is a traditional simple load control device such as a ripple receiver, which has historically been placed on the load side of the meter and at times deep in the customer premises (e.g. at pool pumps) in jurisdictions such as NSW and Qld.

The Victorian DNSP's concerns over the operational limits resulting from the wording of clause 7.8.6(c)(2) are further increased if the network device (former AMI meter) is not on the supply side of the MC's meter.

If the DNSP's network device is on the load side of the MC's meter, it would render the network device less effective because:

1. DNSPs will be prevented from monitoring the network conditions when the MC's meter is de-energised. Alternatively, when a network device is on the supply side of the MC's meter, it would ensure continuity of network services such as supply monitoring and fault identification.
2. The customer's meter reading would include the energy consumed by the network device when it should not.
3. The network outage status at the connection point would be misled by the MC's disconnection operations.
4. If a MC remotely de-energises a customer and the customer contacts the DNSP to complain about the loss of supply, DNSPs would not be able to 'ping' the network device to confirm supply available. Failure by the DNSPs to distinguish a MC's disconnection from a network-related supply outage may result in a wasted truck attendance.
5. Supply capacity control functionality enables a DNSP to disconnect the MC's meter from the point of supply – DNSPs have a regulatory obligation to disconnect at the point of supply for safety reasons. For example, where neutral integrity fault is detected through the neutral integrity functionality of the AMI meter, disconnection in the first instance would be through the network device.
6. The MC's meter will need to replicate any multi element tariff and load control data streams. If the network device is on the load side, the MC will be prevented from replicating multi element tariff and load control data streams (figure 1). Alternatively, if the network device is on the supply side it is possible to replicate multi element tariff and load control data streams (figure 2).

**Figure 1 : Network Device on load side**

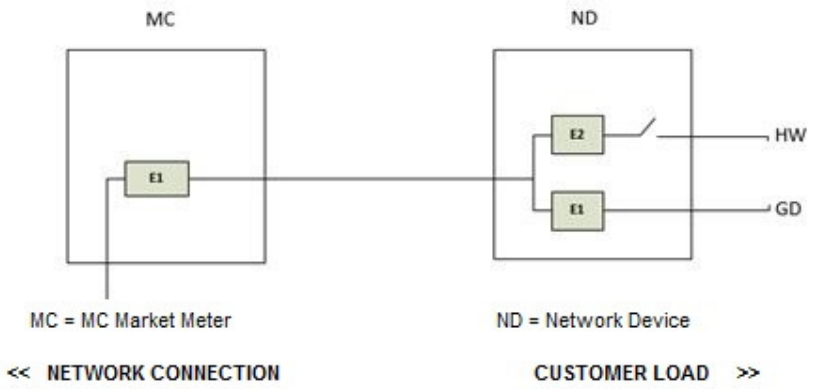
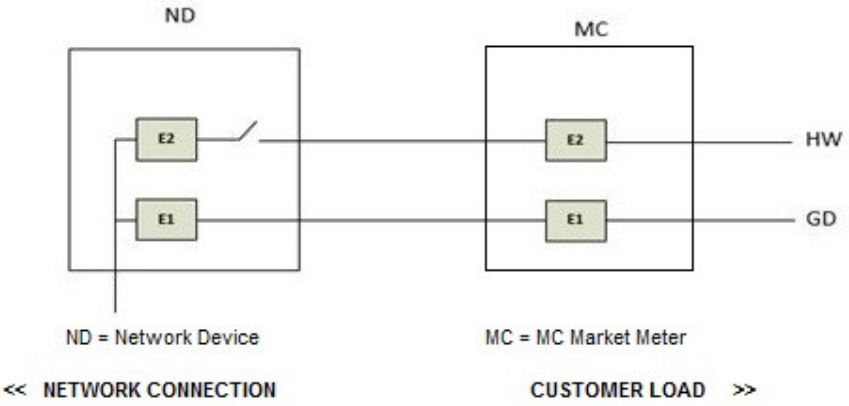



**Figure 2 : Network Device is on the supply side**




**Note:** E1 and E2 represent interval data streams required to support existing tariffs

The network device located on the load side will support some envisaged Victorian DNSP outcomes but, as detailed above, these limited outcomes will reduce the effectiveness of the network device as a credible alternative to retailer-MC provided services and hence still expose the DNSPs to outcomes of negotiations for these services from the retailer MC.

# 3. Data access

It is very difficult to be confident from the draft rules what base level metering data and meter services will be provided to DNSPs through the Retailer-MC-MDP relationship, and to understand the financial basis of obtaining that metering data. We understand that the AEMC's policy intent is that DNSPs are to be provided at no charge[9] the base level metering data and meter services that support their regulatory obligations and is necessary to bill customers.

**Overview**

The draft rules are not clear on what the DNSP's base level metering data requirements are and the basis of payment for the base level metering data and meter services.

We ask the AEMC to enshrine in the Rules principles to ensure that:

- end use customers pay only once for base level metering data requirements through the MC-Retailer relationship;
- DNSPs' base level metering data and meter services requirements reflected in MCs' regulatory obligations. These include:
  - obligations under Chapter 6 of the NER, and the new NER tariff structure statement requirements;
  - other state based regulatory obligations; and
  - requirements to enable customer billing.

## 3.1 Base level metering data and meter service requirements

Victorian DNSPs are required to provide core services to customers in order to meet their obligations under the Rules, the Electricity Distribution Code and Use of System Agreements. For the Victorian DNSPs this requires basic metering information and it is important that customers pay the lowest price for all basic services. For example, the Victorian DNSP's core distribution services require base level metering data for:

- billing retailers and direct-billed customers;
- undertaking tariff development in accordance with the tariff structures statement requirements and compliance checks to ensure compliance with the AER revenue cap;
- efficiently responding to customer off-supply calls if we cannot access services from the MC to check the meter status; and
- using remote setting of switching times to manage feeder loading. It is essential to have this capability for the network; if commercial agreement cannot be reached with a new MC, the position is untenable.

[9] That is, no charge beyond those generally applicable now as a market participant.

In its draft determination, the AEMC[10] states:

> *Clause 7.15.5(d) provides that the Metering Data Provider (or AEMO, where AEMO is responsible for the provision of metering data services), must ensure that access is provided to metering data from the metering data services database only to the parties referred to in clauses 7.15.5(a)(1) to (6) and (a)(11). In general terms, these parties are Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation, the relevant Metering Coordinator, the relevant Metering Provider, the Financially Responsible Market Participant, the Network Service Provider associated with the connection point, AEMO and its authorised agents, and the AER or jurisdictional regulators on request to AEMO.*
>
> *One effect of amendments noted in the last bullet point above is that these parties will only have an automatic entitlement to access metering data from the metering data services database. If they wish to receive other metering data directly from the Metering Data Provider, they will need to negotiate access to that service on commercial terms. Other parties that are entitled under clause 7.15.5(a) to receive metering data will also need to access that data from the Metering Data Provider and negotiate access on commercial terms.*

On the one hand, the AEMC's view is that clause 7.15.5(d) is intended to clarify that the DNSPs have an automatic entitlement to access the data from the metering services database[11] but on the other hand, the AEMC says that if DNSPs wish to receive other metering data directly from the MDP, then they will need to negotiate access to that service on commercial terms.

We note that an earlier version of Chapter 7[12] included an obligation on the Financially Responsible Market Participant (**FRMP**) for payment of all costs associated with meters – i.e. provision of meters, metering data, settlement ready data, etc. With the new roles and relationships created, it is important to reinstate clear obligations, included for payment of an entity, and those obligations must be unambiguous.

## 3.2 Changes proposed

Therefore, the Victorian DNSPs believe it is imperative that the new rules provide an explicit obligation on MC's (or their MDP) to provide metering data to DNSP's at no charge. This will ensure that end use customers only pay once for metering data relating to the minimum services specification and that meets the DNSP's regulatory obligations. This means that:

- DNSPs should not pay additional charges for metering data accessed from the MDP's metering services data base nor AEMO's metering data base:
    - The FRMP pays the MC to procure and provide minimum/basic data which must meet customer needs for each jurisdiction (both the DNSP data stream level data and AEMO's net market settlement data).

[10] AEMC draft determination, pages 165 and 166
[11] Although the Vic DNSPs view is that this is not clear – refer Appendix A.
[12] Clause 7.3.6 in Version 36 of the NER, in 2010

- The base level metering data requirements must meet DNSPs existing regulatory and billing requirements:
    - The Victorian DNSPs should be provided with access to meter data on a commensurate basis with that the Victorian DSNPs are currently required to provide/receive for AMI (i.e. the same level of services and performance standards).

Appendix A sets out more detail on:

- Uncertainty of the base level metering requirements given the multiple rules, and the need for procedures and service levels to be developed
- Victoria's minimum required performance standards and service levels
- Victoria's minimum metering data requirements.

# 4. Victorian specific transition matters

The Victorian DNSPs ask the AEMC to recognise and address Victorian-specific implementation challenges. After considering new roles and likely outcomes, the Victorian DNSPs believe that the policy intent is at risk due to problems with practical workability. The Rules should create new arrangements, *and also* deal with the consequential commercial implications fairly.

In terms of the AEMC's assessment criteria for these rule changes,[13] these concerns affect competition, and administrative burden and transaction costs.

**Overview**

The AEMC needs to recognise and address Victorian-specific implementation challenges, to reflect the SCER/COAG Energy Council and EMRWG intent.

Specifically, we ask for:

- Clear recognition in the NER that enables continued cost recovery of AMI meters installed prior to contestability, in the event of meter service charges becoming unregulated;
- Grandfathering of Victorian installed AMI meters and associated systems as type 5;
- Recognition of, and allowance for, the interaction with Victorian instruments, and the new problems created in relation to meter types and definitions;
- A collaborative approach to working through detailed issues and solutions.

There are pragmatic opportunities to streamline implementation, and minimise costs in Victoria These are:

- Deemed accreditation and simplified registration processes for continuing roles in relation to AMI meters installed prior to the introduction of contestability; and
- using current services and data as a starting point for defining the required services.

## 4.1 Need to recover costs of Victorian mandated meter rollout

The Victorian DNSPs acknowledge that a policy decision has been taken by COAG that metering services should be provided on a contestable basis. The Victorian Government mandated a distributor-led roll out of high functionality smart meters over the period 2010 to 2013. On behalf of Victorian consumers, the Victorian DNSPs have installed over 2.8 million smart meters at residential and small business premises. To support the mandated roll out and enable the benefits of smart meters to be realised, we were also required to invest in communications technology and IT systems. Under the AMI OIC we are currently recovering the costs of these investments over the life of the assets.

[13] These assessment criteria are described in section 2.3 at page 25 of the draft determination.

At the time metering contestability is introduced there will be significant value of unrecovered investment costs. The introduction of contestability therefore creates uncertainty regarding our ability to ensure recovery of these sunk investment costs. We therefore agree with the AEMC's view that DNSPs should be able to recover the residual costs of investments made to provide metering services prior to the introduction of contestability. We understand that the draft rule leaves the issue of how cost recovery is implemented to the AER.

We note however that in the case of Victoria, where smart meters have only recently been rolled out and the residual capital value of the meter and associated infrastructure is high, there are perverse incentives created, and serious equity issues arise, if the party choosing to exit the regulated metering service does not bear the economic costs, including the broad societal costs, of a decision to invest in a competitively sourced smart meter when a functionally rich meter already exits at their premises.

Further, there is a risk that the AER classifies the regulated metering services as unregulated in future regulated periods and thereby creates uncertainty regarding whether Victorian DNSPs are able to continue to recover the sunk investment costs associated with meters installed during the Victorian smart meter derogation. We consider that the AER must continue to ensure full cost recovery for investments made to support meters installed during the derogation.

Notwithstanding this position, as time passes the distributor-provided metering services which have been previous fully regulated will be subject to decreasing levels of regulation, and the AER may move at some point in time to classify the services "unregulated".

### 4.1.1 Proposed approach to drafting

It will be difficult to draft rules that work effectively both initially, and following a change of MC affecting an AMI meter. The Victorian DNSPs ask that the AEMC works closely with us in progressing this task.

## 4.2 Grandfather Victorian AMI meters as type 5 meters

The Victorian DNSPs support the AEMC's proposal that the Victorian DNSP for the advanced meter roll out remain the MC until a new MC is appointed. However, the proposed rules are not clear that the DNSP's metering installations which are smart metered may remain as type 5 meters in the NEM.

We propose the following arrangements to give effect to the policy intent, for economic efficiency, and administrative simplicity.

We recommend that Victorian AMI meters which are currently subject of regulated metering arrangements under the derogation remain as type 5, and that a similar rule to 9.9C.6 is implemented in Chapter 7 or 11. The advantages of this approach include:

- It will ensure a largely unique NMI discovery outcome (type 5 and *read type* is "daily remotely read") for FRMPs and MCs to recognise those type 5 Victorian meters that have transitional status, and where exit fees will apply.

- It would avoid the need for Victorian businesses to incur unnecessary costs and resource hit of accreditation and IT changes to process their existing AMI meters into the market as type 4 meters.

If a Victorian DNSP chooses[14] to operate in the new and replacement market *post* the commencement of the new rule, then the new meters would be un-regulated, described as type 1 to 4 in accordance with the Rules, with appropriate IT and MDP accreditation upgrades undertaken to operate them. These new and replaced meters would be NMI discoverable as being non regulated.

### 4.2.1 Proposed approach to drafting

This will require a new clause (we suggest 11.78.9) that achieves the following outcome:

> **Victorian AMI meters installed before the competitive metering start date continue to be deemed type 5 meters, until they are replaced.**

The Victorian DNSPs ask that the AEMC works closely with us to progress this task.

## 4.3 Suggested changes to improve clarity

This section describes a number of areas of uncertainty, practical difficulties and some inconsistencies in the draft rules. It then makes recommendations on how these might be addressed by the AEMC.

The Rules drafting appears to assume that the MC, MP and MDP roles all churn together and the deemed MC appointment and terms and conditions which come to an end also end the DNSP's MP and MDP roles at the same time. However this is not necessarily the case. In testing likely scenarios, we have found some important areas of uncertainty that are yet to be resolved.

For example, under the new draft rules, where a Victorian DNSP begins as the deemed MC for an AMI meter, and then the FRMP appoints a new MC but *does not* churn the other metering roles (i.e. MP and MDP continue to be provided by the Victorian DNSP), it is unclear:

- whether the metering services remain regulated services
- the implications for regulated exit fees
- whether the meter continues to be deemed a type 5 meter.[15]

This reform disaggregates merged Victorian commercial and technical metering arrangements that have underpinned the rollout of 2.8 million smart meters. The reform proposals assume that this unbundling can be achieved simply, with negotiated terms and conditions between the DNSPS and FRMPs that apply from Day 1. It also enables contracts based on those terms and conditions to be rendered irrelevant on Day 2 with the appointment of a new MC by the FRMP.

These are practical matters need to be worked through carefully, and commercial or regulatory solutions developed where appropriate.

[14] As distinct from where the NSP is to be the deemed MC at Day 1 for the regulated smart meters it has installed under the Victorian mandated rollout.

[15] Note that the grandfathering solution proposed above will assist here.

Appendix B discusses the issues in 2.2 and 2.3 in more detail. Appendix C outlines other important issues that need to be addressed in the draft rules.

Specific recommendations for dealing with practical difficulties and inconsistencies are:

- For customers consuming between 40-160 MWh per annum:
  - The drafting of clause 7.8.3(a) should reflect the SCER and EMRWG intent. [16]
  - Victorian functionality smart meters should be the minimum standard for all meter exchanges sub 160 MWh per annum regardless of who is MC, who selects the metering, and whether the meter replaces an old type 5 or 6, an AMI meter, or is a new connection.
- For type 4a meters:
  - Type 4a upper limit should be a new z factor17 set by the jurisdiction in Table S7.4.3.1. Ideally this would be set in a consistent manner or level to the x and y, i.e. the same threshold, so that the impact on settlement accuracy and integrity remains unchanged.
  - The AEMO exemption procedure should clearly only apply to metering arrangements below the upper limit of x, y or z so that manually read meters are not allowed in the above 160MWh per annum segment of the market and this should be clear in the Rules.
  - New meters that meet the minimum meter specification and are remotely read should be identifiable to all parties. This should be done in the Rules, by creating a new meter category, or closing off the existing type 4 category for sub 160 MWh per annum customers and creating a type 4b meters.
  - The Rules should guide procedure and protocol amendments, to ensure that all type 5 obligations apply to type 4a meters.
  - The AEMC should correct the missing clock error note for type 5 meters, and provide a similar note for type 4a meters.

## 4.4 Interaction of new Rules and Victorian instruments require time to bed down

The Draft Determination acknowledges some corresponding changes to Victorian instruments, but does not recognise the extent of the changes required[18], nor the complexity of the interaction and sequencing between the two regulatory regimes. Also, it did not recognise the extent of ongoing Victorian regulatory obligations.

[16] SCER letter to AEMC, Rule change request, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, October 2013, p33.
[17] The jurisdictional upper limit to apply to a type 4A metering installation (i.e. 160MWh).
[18] The AEMC has erred in asserting that some Victorian obligations cease, when they do not.

The AEMC suggests in relation to Victoria that;[19]

- The derogation under rule 9.9C will be extended by the AEMC to align with the commencement of the new rule;[20]
- The proposed NERR amendments be implemented for small customers (with the Victorian Government and Essential Services Commission to consider amending the Energy Retail Code);[21]
- The Victorian Government amends the Victorian AMI Cost Recovery Order in Council (CROIC) to reflect the change from "Responsible Person" to "Metering Coordinator" and other consequential changes in the final rule;
- The Victorian Government may amend the AMI Specifications Order in Council.[22]

The AEMC refers only to amendments to the Victorian Energy Retail Code and the CROIC. However, the work required far exceeds that implied in the draft determination. As practical examples:

- The 1 April 2016 target date for new procedures may be affected by Victorian-specific changes to CATS procedures or B2B procedures (e.g. for remote services timeframes, further benefits realisation for Victorian AMI, etc. requiring new information exchange arrangements).
- Similarly the National Metrology Procedure has a number of Victorian jurisdictional arrangements which need to be reviewed by the end of 2017.
- Safety arrangements for meter install and remote services need to be assessed by parties other than the Victorian DNSPs.

Timely, well-coordinated Victorian regulatory decisions and policy guidance are critical to successfully implementing the national reforms in Victoria. For example:

- The Victorian Government and Essential Services Commission need to make consequential changes to Victorian instruments, in time for process development and procedure consultation to commence around November 2015. This affects work by AEMO and IEC working groups.
- Importantly, do customer protections relate to the meter capability and the changed service delivery, or are they limited to a subset of small customers and result in reduced protections? (See section 10.)
- It is assumed that information exchanges proposed between parties under the NERR which will be implemented through changed B2B arrangements, and should be supported by the relevant corresponding Victorian instruments (e.g. retailers' notification to distributors of remote re-energisation and remote de-energisation etc.).

[19] See Summary for Appendix F of the Draft Determination (at page 277).
[20] See section 4.9.1 of the Draft Determination (at page 74).
[21] See Summary for Appendix F of the Draft Determination (at page 277).
[22] See Table 5.2 on page 85 of the Draft Determination.

## 4.5 Opportunities for efficient implementation

We recommend that the AEMC adopts a pragmatic approach to the initial accreditation and registration of DNSPs to perform the MC, MDP and MD roles on Day 1. We ask that industry adopts the Victorian experience and installed capabilities as a starting point in the development of procedures and protocols.

### 4.5.1 Deemed accreditation at Day 1

The purpose of accreditation is to establish that each entity has the operational, technical and financial capability to perform its role in the reformed market.

Victorian DNSPs currently perform roles equivalent to that of MC, MDP and MP, and meet all existing regulatory requirements. The AEMC's draft determination requires DNSPs to continue to perform these roles from Day 1 – albeit subject to new regulatory obligations - in the new framework. The DNSPs have no choice in this.

In these circumstances, streamlined registration processes and deemed accreditation can avoid unnecessary costs and inefficient allocation of industry resources. It would serve no purpose for AEMO and the DNSPs to expend time and effort in going through a new accreditation process in relation to the DNSPs' regulated meter base. For the Victorian industry, it is the aspects of the regulatory framework obligations in relation to new entrants, roles and meters installed after competition is implemented that are important to give effect to the new policies.

Accreditation should only be required when a Victorian DNSP chooses[23] to operate in the new and replacement market *post* the commencement of the new rule. In those circumstances, the cost of the new meters would be un-regulated. They would need to be described as type 4[24], with appropriate IT and MDP accreditation upgrades undertaken to operate them as type 4. These new and replaced meters would be NMI discoverable as being competitive, and as *not* having a regulated exit fee exposure.

If the proposal that Victorian AMI meters which are the subject of regulated metering arrangements remain as type 5 is rejected, current drafting in clause 11.78.7(g)(1) would need to be reversed, and a new deeming provision added in that rule.

### 4.5.2 Current services and data as baseline starting point

Investment in smart meter rollout has largely been completed in Victoria. Victorian DNSPs need certainty that the current timing, content, format and service specification of metering data – on which their IT and billing systems are based – will continue uninterrupted and not result in additional costs being incurred. This certainty is required to deliver the network benefits of the smart meter investment, and will underpin future investments that are planned by the Victorian DNSPs to deliver further network benefits. See Appendix D for a more detailed discussion.

[23] As distinct from where the NSP is to be the deemed MC at Day 1for the regulated smart meters it has installed.

[24] Or variations of type 4 meters.

Extensive work is required to implement these and other Power of Choice reforms. Opening up *all* technical matters to review would further complicate the task, creating additional workability risks, and adding unnecessary costs.

To reopen all aspects of the required supporting processes and procedures *without drawing on the Victorian experience* may lead to inefficient outcomes and unnecessary duplication of effort. Further, not giving recognition to the existing Victorian arrangements risks inefficient return on the investments that have been made to meet higher standards of the Victorian regulatory obligations.

Therefore, the Victorian DNSPs propose that services and capabilities should be commensurate with current service levels using Victoria's existing minimum functionality specification as the basis of defining initial metering data services and meter services in the new regime.

# 5. Making the Retailer-MC-DNSP relationship work

This reform involves unbundling of roles and relationships that have underpinned investments in the Victorian AMI meter rollout. The changes increased the need for coordination and cooperation and measures to make the relationships work to avoid the potential for exercising of market power.

The new relationships and roles proposed may not work as expected by the AEMC, particularly in Victoria where the mandated AMI roll-out is based on a higher metering capability than is proposed nationally.

Victorian DNSPs are also concerned that the commercial incentives on the parties may undermine the AEMC's proposed model nationally and lead to adverse customer outcomes. This is particularly so where under the new rules:

- There are implicit expectations of MCs in relation to supply matters, without clear obligations on them; and
- By default, obligations continue to fall on DNSPs.

In terms of the AEMC's assessment criteria for these rule changes,[25] these concerns affect competition, transparency and predictability.

**Overview**

These reforms warrant a **new overarching objective** to guide decision makers and stakeholders – the objective should be based on the NEO, fit-for-purpose and effective for the new market paradigm

The Victorian DNSPs ask the AEMC to support additional rules that:

- regulate the behaviour of retailers in appointing MCs;
- enshrine new objectives and principles for the new market arrangements;
    - these should require MCs to provide metering services that are:
        - in the long term interest of consumers;
        - meet the reasonable needs of Retailers and DNSPs;
        - encourage smart integrated systems and processes;
- clearly impose all core obligations on all entities expected to perform them; and
- incorporate consistent and appropriate confidentiality requirements.

[25] These assessment criteria are described in section 2.3 at page 25 of the draft determination.

## 5.1 Targeted objectives and principles

There should be clear and appropriate objectives, and possibly principles, to support competitive metering decisions by all stakeholders.

The NEO was developed in 2005 to guide regulation, operation and development of the wholesale and retail electricity markets, as then conceived. The NEO alone is unlikely to provide adequate guidance to decision makers (notably, AEMO and the AER) and market participants, to ensure that the outcomes contemplated in the revised Chapter 7 are achieved.

We note:

- A competitive metering market is a major new market development that was not considered when the NEO was drafted.
- There is a precedent in national energy retail reforms, which necessitated a new National Energy Retail Objective (**NERO**).
- In essence, though AEMO is a technical system operator, in these decisions it acts effectively as an economic regulator, imposing new regulatory obligations on market participants, and making trade-offs.

Therefore, these reforms are likely to warrant a new overarching objective to guide all stakeholders – the objective should be fit-for-purpose and effective for the new market paradigm.

In the same way that the NEO is supported by revenue and pricing principles, it may also be appropriate to incorporate targeted principles for the competitive metering market and services (e.g. demand side management). An example might be principles that require MCs to provide metering services that:

- are in the long term interest of consumers;
- meet the reasonable needs of Retailers and DNSPs; and
- encourage smart integrated systems and processes.

Section 5 describes how such objectives and principles would guide the development of procedures and protocols.

## 5.2 Access and safety regulation of MC/MP behaviour

The Victorian DNSPs acknowledge that:

- Outcomes in this new market are unclear;
- The AEMC has made a judgement on costs and benefits of regulation of price/non-price terms offered by MCs, and settled on no-regulation initially; and
- The AEMC decision was made to allow DNSPs to leave a network device on premises as a way of managing the risks to Victorian DNSPs in accessing secondary and value add services.

However, the Victorian DNSPs are not confident that general competition laws will suffice to prevent MCs discriminatory behaviour that could undermine the policy intent of these reforms. It is rarely the situation that policy makers completely deregulate price/non-price terms without an evaluation of market performance.

Some of the measures proposed in this submission may assist in this regard, notably targeted competitive metering objectives in section 5.1, and guidance for procedures, protocols and service delivery (see section 7).

We are also concerned about the potential safety implications of the entry of new players that may lack the experience and awareness of this complex environment. We ask the AEMC to consider compelling AEMO to take on board jurisdictional safety regulators requirements and include them in service provider accreditation assessment and performance of periodic safety audits. AEMO is suggested, given its role in developing procedures and protocols, and in accreditation and regulation of new entities. This regime would need to be established in conjunction with the responsible safety authorities in each jurisdiction.

## 5.3 Effective contracting regime

There are simple measures that the AEMC could implement to support its policy intent. The justification for such measures is outlined below.

In the new competitive market, the entities with the greatest need for secondary and value added services will be the DNSPs. However it is the Retailers that appoint the MC. The DNSPs may not be able to procure the secondary or value added services they require cost effectively. The AEMC envisages that DNSPs will do so as follows:

- An NSP, with the cooperation of the MC and the relevant Retailer, may choose to help fund the installation of advanced meters in its network area and secure access to relevant valued added services provided by these meters.
- Contracts (assumed to be long-term) between the NSP and the MC would set out price and non-price terms for the supply of the negotiated value added and secondary services.

However, Victorian DNSPs are concerned that the AEMC's proposed process may not result in their needs for secondary and value added services being achieved, and if they are achieved, whether they will be cost effective. For example, under the AEMC's model in the draft rules, the following market failures could arise:

1. Arrangements lack all features of a workably competitive market:
    a. In normal workably competitive market, the right to appoint a service provider is available to anyone, but the AEMC has restricted the appointment of MC to Retailers.
    b. We understand from NZ experience that the retailer-MC arrangements include exclusive dealings for services/data thus reducing the ability of networks to access data and effectively stifling the energy services market or at the very least limiting the market to competition amongst the few retailer MCs.
2. Electricity market structural separation, by definition, causes narrow focus by parties on their own interests

3. The commercial interests of Retailers and DNSPs may not always align with the interests of consumers to optimise outcomes for setting metering service decisions:
    a. Structural separation was never designed with metering contestability in mind.
    b. In a normal competitive market, Retailers and DNSPs would be allowed to merge to encourage optimal economic decisions on metering, which may be the first best solution to optimising decisions.
    c. But government policy does not allow this (for good reasons) because it is focused on promoting competition in other markets (i.e. retail and wholesale markets).

Though this problem is more pressing in Victoria, it will arise nationally. A potential solution is regulation to encourage appropriate behaviour, for example by requiring that:

- A Retailer must act in good faith, and cooperate with DNSPs on system needs.
- A Retailer must not trigger Retailer-MC contracting process without giving reasonable notice to DNSP.
- A Retailer must provide information to the DNSP on its chosen prospective MC(s) to enable the DNSP the opportunity to negotiate required services and service measures with the new MC.
- There is a reasonable time between providing information to DNSP and executing Retailer-MC and MC-DNSP contracts.
- DNSPs are able to raise alleged breaches of these requirements with an independent body.

Metering and supply related services are provided by DNSPs as part of customer connections services and provided as part of the Distribution Licence for the benefit of all customers, and where a regulated distributor is MC these services must be provided on a non-discriminatory basis:

> *"must not unreasonably discriminate, or have the effect of creating unreasonable discrimination, between retailers or between customers of any retailer."*

These same services are governed by a number of regulatory instruments and access arrangements also include an obligation relating to fairness of terms with the Regulator being the arbitrator;

> *"A default use of system agreement must contain terms and conditions which are fair and reasonable and do not unreasonably discriminate, or have the effect of creating unreasonable discrimination, between retailers or between customers of any retailer."*

The Victorian DNSPs are also concerned that these outcomes are not clearly part of the new framework, noting that the existing drafting in the NER in providing additional services based on incremental cost is being deleted. This just exacerbates the concerns relating to discrimination and hold out.

The DNSPs are keen to work with the AEMC and Retailers to develop pragmatic ways to address concerns.

## 5.4 Effective, consistent confidentiality requirements

We suggest that clauses 7.8.6(c)(4) and (d) in the draft rules entail unnecessary duplication.

Clause 8.6.1(b)(1) already provides that a registered participant must not disclose confidential information to any person except as permitted by the Rules. Therefore, with 7.8.6(d) making the network device data confidential information, 7.8.6(c)(4) adds nothing and should be deleted.

We note the exception in clause 8.6.2 in relation to confidential information, i.e.:

> (c) (consent): the disclosure, use or reproduction of information with the consent of the person or persons who provided the relevant information under the Rules

We are concerned that there is a technical argument that the customer does not "provide" the network device data to the DNSP and that the consent is in some circumstance likely to only be implied? If the AEMC shares these concerns, we would like the opportunity to discuss and clarify the intent, and supporting drafting.

We also note an inconsistency between clause 7.15 and 7.8.6 in the draft rules.

- Clause 7.15.1 states that energy data, metering data, NMI standing data and metering register data are confidential information under the Rules.
- Clause 7.15.5 then allows for a range of uses and disclosures that are broader than that allowed for network device data.

We suggest that the subparagraphs of clause 7.15.5 should apply equally to network device data. Also, we ask the AEMC to consider replicating subparagraphs 7.15.4(b)(2) in relation to network device data as part of a set of Rule that allow customer related use of network device data.

# 6. Workable implementation

The AEMC's draft determination is a significant policy which not only impacts technical aspects of the NER but also industry risk allocation, and potentially creates conflicts with existing regulatory requirements. The Victorian DNSPs are concerned that the reforms will not work as intended, unless they incorporate a rigorous and best practice approach to implementation.

The Victorian DNSPs are concerned that significant aspects of the details of this reform are yet to be worked through. That detail affects the efficient sequencing and timing of implementation, the choice of an effective start date, and drafting of appropriate Rule changes. In our view, a final determination by the AEMC in July 2015 will not support best practice. Locking in rules changes too soon (and before adequate analysis and scrutiny) will undermine industry's ability to achieve efficient, effective reform outcomes, without unintended adverse implications for customers.

In terms of the AEMC's assessment criteria for these rule changes,[26] these concerns affect transparency and predictability, system integrity, and administrative burden and transaction costs.

**Overview**

Effective implementation should:

- achieve a safe and seamless transition for customers;
- be effective and efficient for stakeholders.

The Victorian DNSPs ask the AEMC to support:

- establishing a government-endorsed reform implementation body, supported by an independent program manager, secretariat and program office;
- developing a detailed implementation work plan to inform a revised target start date;
- new rules that enable a deferral of the effective start date by say, the COAG Energy Council, based on a readiness assessment.

The AEMC needs to recognise and address Victorian-specific implementation challenges.

## 6.1 Best practice approach to reform implementation

We have developed an implementation approach based on successful Australian reforms, including past National Electricity Market reforms, and the National Gas Market Development Plan developed by the Gas Market Leaders Group.[27] We considered the approach and resources applied for the recent NECF reforms. We also drew on recent regulatory and governance reforms of supplier-led smart metering in Great Britain, and the market driven rollout in New Zealand.

[26] These assessment criteria are described in section 2.3 at page 25 of the draft determination.

[27] See Chapter 4 Key lessons for the future, National Electricity Market, A case study in successful, microeconomic reform, prepared for the Australian Energy Market Commission, KPMG 2013.

A best practice approach would establish effective governance and steering committee arrangements – with industry representation – to oversee implementation. An independent project manager would be appointed, and a project secretariat and project office established. There would be clear accountability for implementing reforms.

This experience suggests the following approach to implement significant policy reforms:

**Table 1 – Applying lessons from successful reforms**

| Element | Recommended approach to implementation |
|---|---|
| Clear objectives | The COAG Energy Council should establish clear implementation objectives, scope, and timelines |
| High level government leadership, with effective delegation | Governments should take overall leadership responsibility for implementation but maximise delegation of implementation to other bodies<br>Governments should make timely decisions on any policy questions that emerge through the implementation |
| Establish a single point of coordination | Governments in consultation with stakeholders should establish a governance body to oversee implementation<br>The governance body's role would provide a single clearing house for coordination of implementation activities, monitoring and providing policy advice to governments<br>The governance body would be wound up when implementation is complete |
| Establish an effective governance body to oversee coordination | The governance body should be independently chaired and include independent experts and stakeholder representatives<br>The governance body should operate transparently. It should have open meeting sessions with AEMO, AEMC, AER and government departments able to attend as critical stakeholders |
| Ensure buy-in to the governance body role | An establishment chairman should be appointed by governments in consultation with affected parties to lead the establishment of the governance body<br>The establishment chairman should lead development of the terms of reference for the governance body in consultation with relevant bodies and industry<br>The terms of reference should be endorsed by the COAG Energy Council |
| Effective stakeholder participation and consultation | The governance body would be highly consultative and transparent<br>It would establish appropriate consultative processes (committees, working groups, forums etc.) |
| Adequate support and resourcing for the governance body | The governance body will require:<br>○ a secretariat to support governance<br>○ a project office<br>○ adequate funding |

| Element | Recommended approach to implementation |
|---|---|
| Ensure role clarity | A priority task for the governance body in consultation with the AEMC, AEMO and AER, jurisdictions, state based safety authorities, and industry would be to:<br>• lead analysis of all implementation roles and tasks required to be undertaken by each body, and:<br>  ○ identify interdependencies, and any gaps or overlaps; and<br>  ○ analyse other existing institutional arrangements (e.g. Information Exchange Committee)<br>• analyse whether any government policy decisions are required and provide advice to governments<br>  ○ clearly document agreed roles and responsibilities for each body |
| Clear implementation plan | The governance body would coordinate development and updating of an implementation plan |
| Monitoring of implementation | The governance body would monitor development of the implementation plan and report back to governments |

## 6.2 Sequencing and timing of this and related reforms

With significant complex reforms of this nature, stakeholders need a high level of confidence in workability before details are locked in, and the reform 'goes live'. The Victorian DNSPs are concerned that the AEMC's proposed reforms will not be achievable by 1 July 2017 because:

- As yet, there is no detailed work plan developed with industry to test the feasibility of the start date of this and other related Power of Choice reforms (though AEMO is working with the industry to develop one).
- Many consequential regulatory changes must be made in Victoria by the ESC[28], the Victorian Government and the safety regulator. Each change will impact on sequencing and implementation timing.
- There are a number of outstanding fundamentals of the regime which must be in place as the basis of development. Examples include: there is no clear decision maker for the new B2B platform; no AEMO/IEC budget to facilitate the IEC work and progress the B2B procedure changes and new B2B requirements; no policy position / guidance regarding the range of services to be supported by the Shared Market Protocol.

Though there are benefits in setting a challenging commencement date to maintain reform momentum, this reform's complexity and its many new components yet to be developed (i.e. procedures and protocols as set out in table 2 of section 7.3) create a significant risk that a hard-wired start date will not be met, or that rules (which subsequent detailed analysis exposes as sub-optimal) will be made too soon.

[28] Relevant clauses of the Victorian Distribution Code are set out in Appendix F.

**Effective implementation should achieve a seamless transition for customers, and be effective and efficient for all stakeholders.**

Building on Table 1, to achieve these outcomes for the competitive metering reforms, the Victorian DNSPs believe that the following must occur:

1. Appointment by governments (i.e. the COAG Energy Council) of an independent program manager, secretariat and project office with clear accountability for implementing the metering competition and other Power of Choice reforms (essential)
2. Key scope matters must be in place before process development and procedure drafting including:
    a. related NER changes arising from other Power of Choice reviews which may benefit from being included in the one release
    b. shared market protocol concepts and approach for shared market platform
    c. metering service level specification, and various procedures
    d. jurisdictional amendments that impact transactions and procedures
    e. clear safety arrangements for meter exchange and remote energisation services for each jurisdiction.
3. Work packages need to be realistic and achievable by all parties (where appropriate, allowing for staged implementation).
4. Clear industry endorsed work plan (including bundling of related rule changes) which is to be developed based on:
    a. the majority of protocols, procedures and build packs being completed before detailed industry design and build commences
    b. allowing time for industry testing and certification, then accreditation
    c. decisions being made on the new B2B platform and new B2B transactions and, if necessary, the new B2B/SMP format
    d. drafting of relevant procedures only once, unless duplication is unavoidable.
5. The governance body for technical decisions (see section 8 of this submission) should be determined before final determinations on related procedures.

The work plan must take account of all component parts, interrelationships and sequencing. For example, we note that load management and its implications for network security are being considered by COAG Energy Council as part of current consultation on regulation of new products and services.

The Victorian DNSPs note the amount of work AEMO needs to undertake to develop, consult and implement the raft of procedures, as well as accreditation and registration changes outlined in Table 2 of this submission. The work for AEMO to manage the development and facilitate/consult on the changes for these procedures, including the B2B procedures, is a massive undertaking in itself.

The Victorian DNSPs consider that there is a need for coordination of a number of other activities by an independent party:

- Coordination of the AEMC various rule changes into an appropriate, efficient release schedule that is achievable;
- Coordination of practical implementation of the policy at the more detailed level to allow more timely development of procedures;
- Assessment of jurisdictional metrology variations and the continued use of these moving forward;
- Coordinator of safety regulator and jurisdictional arrangements for the meter reform and the input of these requirements into the accreditation arrangements and various information exchange processes;
- Coordination of specific Victorian regulatory changes to ensure that they are finalised in a timely manner to ensure that the procedure development and consultation has taken the issues on board;
- Clarify budget/decision making processes for the management of the B2B arrangements – updated B2B procedures, new B2B hub, and the new SMP.

This need for coordination across rules and policy, safety regulators and jurisdictions is similar to the NECF programme and the independent project office which reported to the EMRWG. A similar model could be adopted for these competitive metering reforms. This may include safety risk assessments for remote re-energisation and de-energisations services in a multi-party energisation process, and the use of auto-disconnect features in the meter, local display of status, retailer call centre scripts, and related matters.

The Victorian DNSPs note the efforts being made by AEMO to develop an implementation plan, and recognise the further input required. We agree that further discussion and agreement is required on practical, safe, cost efficient processes to enable the roll out, and that these may result in consequential amendments in the Rules. It is important that these more detailed processes are allowed to run as we have described in this submission. They need a multi-disciplinary team – not just legal drafters – to work through the detail before the rules are finalised. We also recognise the scale of effort required for the AEMC to review and consider submissions.

We ask the AEMC to ensure that there is an agreed industry work plan which incorporates the necessary input from a range of stakeholders, including safety regulators, jurisdictions and others, *before* the rules are finalised. Any resulting changes in the final determination date should also be reflected in consequential changes to the interim dates and the implementation date in order to allow sufficient time for the detailed procedure changes and build/test/implementation of those changes.

## 6.3 Commencement date linked to industry readiness

As noted above, despite best efforts, the start date of 1 July 2017 may not be achievable. In our view, commencement should be linked to industry readiness.

Victorian DNSPs strongly support an achievable, firm start date, and a timely assessment of readiness. This is essential for planning purposes, and to:

- ensure a seamless transition for customers;
- manage our metering installation obligations that will continue until the new competitive arrangements become effective; and
- enable the AER to determine the metering revenue for Victorian DNSPs for 2016-20 with a level of certainty regarding the timing for the introduction of contestability.

However, our recent experience in rolling out 2.8 million smart meters gives us unique insights into the complexities of this reform. Whatever is the ultimately agreed effective date of the Contestability Rule change and the SMP Rule change there is potential for some industry Participants to not be fully ready to participate in the new regime.

The changes to the distributor, retailer and AEMO systems to enable the operation of a contestable meter regime, as envisaged in the draft determination and the draft rule, are extensive and potentially impact on business critical systems. Further, revised current processes and the new processes to deliver the contestable meter regime will have a number of interdependencies between the service–requester and service-delivery entities. Industry and AEMO will consider these interdependencies as part of the contestability regime process and procedure development effort. Where it is considered that effective and efficient process requires standardisation and automation of a service interchange, a process, procedure and where appropriate business-to-business transactions will be established.

However, if post the effective date either industry or AEMO has not had sufficient time to make the necessary changes to its systems to implement these transactions, then the service exchange will not be effective i.e. the outcome may not be achieved, nor efficient in that the service delivery will consume an inappropriate level of resources.

These outcomes are not conducive to industry cost minimisation, nor to customer service provision, and can result in an unfair imposition of additional costs onto participants who have achieved the necessary system changes.

Hence if multiple industry participants are unready at the effective date, or key process have not been completed (e.g. the shared market protocol or B2B producers have not been developed and market tested) then delaying the date may be overall the most cost effective and least risk outcome. It is very important that continued customer connection and energisation processes work well in order to maintain confidence in smart meters and metering competition. The Victorian DNSPs consider that a mechanism should be included in the implementation model to allow for this type of go/no go decision.

It should be noted that the project for initial establishment of national B2B (which was overseen by a broad stakeholder steering committee and managed by an independent program manager), had an extensive readiness audit and industry testing program. Late in the project this revealed that some major participants were not ready to deal with the new B2B transactions. This was assessed to be a major outcome risk and the B2B implementation date was delayed some months to ensure a smooth transition.

Therefore the Victorian DNSPs recommend that the AEMC includes in the NER provision for an entity, potentially the COAG Energy Council, to review and defer the commencement date, based on an objective assessment of industry readiness.

## 6.4 Shared market protocol

The Victorian DNSPs understand that the AEMC will consult on a further rule change in relation to a new Shared Market Protocol (**SMP**) and these rules may be determined in April/May 2016. The Victorian DNSPs note that a number of changes have been made in the NER B2B clauses and in the mechanism to propose procedure changes more generally.

It is as yet unclear what the final form the SMP arrangements will take or how some of the decisions get made:

- Based on the concepts timings exposed in the draft AEMO work plan and at their 15 April workshop all the changes to facilitate the mandated retailer roll out will need to be undertaken in the B2B Procedures under the IEC
- As currently drafted this means the IEC is tasked with updating the B2B Procedures to adequately deal with the roll out of meters, the various supply interruption and de-energisation arrangements, new parties, new services e.g. meter installation enquiry etc.
- The current draft NER proposes that the IEC facilitate all of the necessary changes by 1 April 2016. The Victorian DNSPs assume that this implies that AEMO will make resources available to ensure that there is an efficient process to make this happen. Refer Section 6.2 for the Victorian DNSP's view re the need for an independent project manager and project office.

The Victorian DNSP's recognise that AEMC at the 15 April workshop stated that the B2B arrangements had a number of opportunities for improvement, including:

- More open forums for development and decision making;
- Enabling other parties to be able to propose a change;
- Allowing a broader range of parties to be involved in consultation.

The Victorian DNSPs suggest that drafting similar to 7.16.7 be inserted under the B2B arrangements to allow any person to propose a change to a B2B Procedure to the IEC. This would address the issue raised by the AEMC by allowing any party to request a change to the B2B Procedures to the IEC. This type of drafting would need to be inserted in 7.17.3 (a) and would allow the necessary amendments to be made to the B2B procedures in the absence of the SMP rule being finalised.

AEMO is proposing that all CATS and B2B Procedure changes are undertaken at open workshops, whilst this addresses the issue of development and working group recommendations with all interested parties in the preparation of the initial, draft and final B2B procedures changes, it could render detailed drafting problematic as this requires intensive and continuous engagement. As with

other procedure amendments under Chapter 7, all consultation is public and notified in the same manner as other Chapter 7 consultations allowing any party to provide a response.

Clause 7.17.4(h) has not had the MC role included in a consistent manner to the adjacent sub-clauses e.g. (i) and (j). The Victorian DNSPs recommend that MCs are included in clause 7.17.4(h).

The Victorian DNSPs consider that these few changes would benefit the interim period until the new SMP arrangements take effect and allow more appropriate input into improved B2B hub capability etc. A key time schedule and hence effective date principle must be that all the relevant procedures whether B2B or SMP must be available before the industry commence detailed design and implementation.

# 7. Better guidance for procedure and protocol development, service delivery

The ability of these reforms to deliver their objectives is dependent on workable, economically efficient procedures and protocols.

Section 4 has highlighted potential flaws in the governance of technical decisions in the draft rules, and also NEM divergence from the United Kingdom model where such decisions are made by an entity that is independent of the system operator, and regulation is effected through an industry code.

The sheer volume of work required of AEMO under the draft rules is daunting (see table 2 below).

As a matter of good regulatory design and practicality, the Victorian DNSPs ask the AEMC to provide additional guidance to AEMO in developing the next level of detailed regulatory instruments. In this area, our concerns affect all of the AEMC's assessment criteria for these rule changes.[29]

**Overview**

The framework needs a new overarching competitive metering objective. Developing that objective will take time and effort, but should be done.

The AEMC is also asked to bolster the guiding principles and specific content requirements for supporting protocols and procedures. Better guidance will facilitate efficient and timely development.

It should be an explicit objective to preserve customer and network benefits already enabled by the mandated Victorian AMI meter roll out.

## 7.1 Why additional guidance is warranted

The Victorian DNSPs are concerned that important detail is yet to be developed and approved by AEMO in procedures and protocols. Procedure development is likely to be slow as market participants debate their vested positions.

In the absence of better guidance in the Rules, we are concerned that procedures and protocols may:

- not deliver as of right, or without additional charges, current base levels of data in Victoria, or nationally;
- advance majority positions, over sound market outcomes;
- see trade-offs made that are not in the long term interests of customers;
- undermine Victorian DNSPs' ability to continue providing current services and network solutions; and

[29] These assessment criteria are described in section 2.3 at page 25 of the draft determination.

- not promote the efficient realisation of smart meter derived benefits that are in the long term interests of electricity consumers, including network benefits.

### 7.1.1 New technical, regulatory role for AEMO

As noted above, the draft rules require AEMO to perform a technical role that is independent of its system operator role, and effectively to act as an economic regulator. It also has wide discretion to elect whether or not to develop technical detail in some areas.[30] We note:

- **Regulators need both objectives and guidance**. In the same way that the AER as economic regulator is able to draw on the NEO *and* clear revenue and pricing principles, AEMO is likely to require more than a high level objective if it is to allocate appropriate priorities and make informed trade-offs.
- **AEMO should be accountable for the quality of its decisions and outcomes achieved**. This implies observing relevant principles from best practice regulation.
- **New competition issues will emerge because of unbundling of metering costs/services.** These will require effective stakeholder consultation, economic and technical expertise to understand and arrive at a solution that best promotes market objectives.

### 7.1.2 Need for clarity on essential elements of minimum services

AEMO's Advice[31] on services to be available from smart meters under a contestable new and replacement rollout identified "primary services". These are codified in the draft Schedule S.7.5 "Requirements of minimum services specification". The service measures associated with these services are to be determined by AEMO in a new procedure under clause 7.8.3(c) of the draft rules, with discretion for AEMO to include in that procedure technical requirements for services.[32]

The DNSPs understand that the AEMC expects these services and procedures to provide a sound basis for fundamental services, and hence enable the key benefits of the new and replacement rollout to be achieved, including those benefits attributed to the DNSP's use of these services.

The DNSPs are concerned that the level of detail in the definition of these services in the Rules does *not* provide adequate guidance to support the AEMC's expectations (or clarity on what the services and their related service measures entail), or to ensure that the expected policy outcomes are achieved.

In the absence of greater guidance, the capability provided by the MC and its service providers may not deliver the services expected.

Appendix C illustrates important errors and omissions with the rules as drafted, that we believe the AEMC needs to address.

[30] See for example clause 7.8.3(d) in the draft rules for procedures relating to the minimum services specification. These, "may also include technical requirements of one or more of the services".
[31] AEMO, Minimum Functionality of Advanced Meters, Advice to COAG Energy Council, November 2014.
[32] See clause 7.8.3(d) of the draft rules.

### 7.1.3 Precedent exists in Chapter 7

Chapter 7 can be easily adapted to provide greater guidance.

The draft rules governing some procedures and protocols already include purpose or mandatory content provisions.[33] We are suggesting building on this approach to incorporate the guidance outlined in section 7.2 below.

## 7.2 Suggested form of guidance for procedures and protocols

AEMO (or any other entity charged with developing competitive metering procedures and protocols) should be required to take into account general guiding economic principles, and specific, targeted outcomes.

These guiding principles will also significantly assist industry working groups in the development of procedures and protocols

As a starting point for the AEMC to develop and test, we suggest (drawing on the Great Britain case study referred to in section 8.3), the following **guiding economic principles**:

- Supporting protocols and procedures should promote the NEO[34] (or a modified objective that supports the NEO[35]) by**:**
    - Facilitating the efficient provision, installation, operation and interoperability of advanced meters at electricity consumers' premises;
    - Facilitating electricity consumers' management of their use of electricity meters through the provision of appropriate information via metering and related systems;
    - Facilitating effective competition between retailers, metering coordinators metering suppliers and meter data providers and others involved in the supply of electricity;
    - Facilitating innovation in the design and operation of energy networks to contribute to improved efficiency;
    - Ensuring the protection of data and the security of data and systems;
    - Recognising existing investments in advanced meters and systems, and existing use of metering data, and the need for a managed transition;
    - Being efficiently and transparently administrated and implemented; and
    - Ensuring that decisions do not compromise safety.
- Minimum metering data specifications and service levels should enable DNSPs to comply with Chapter 6 of the Rules.

[33] See for example draft clause 7.16.3(c) and 7.16.6.

[34] The NEO is set out in section 7 of the NEL as follows: *"The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to: (a) price, quality, safety, reliability and security of supply of electricity; and (b) the reliability, safety and security of the national electricity system."*

[35] See section 3.1.

- Decision makers should be required to consider any relevant jurisdiction-specific requirements, for example:
  - for Victorian load management control, the need for:
    - access to current Victorian meter-based HW load control;
    - understanding and managing any impacts of retailer (and third party) load on network whether over-riding HW load control or other loads; and
  - local metering specifications and service levels.

In addition, some important operational and safety concerns outlined in Appendix C may also be addressed through targeted procedure and protocol content requirements set out in the Rules.

## 7.3 Procedures and protocols affected

Table 2 outlines some of the many tasks assumed for AEMO under the draft rules and draft determination, and the expected timing. This submission provides examples of many significant matters yet to be resolved. The Victorian DNSPs believe that ambitious timelines can only be met, and the reform objectives achieved, if the Rules give AEMO and others the clearest possible guidance on overarching competitive metering objectives, and specific content to address technical and operational needs.

This is particularly important in Victoria where the customer and network benefits of the mandated AMI meter roll out are at risk.

**Table 2 – AEMO procedures, other instruments**

| Instruments | Action | New rule ref. | Completion Date (if known from Draft Determination) |
|---|---|---|---|
| EXISTING | | | |
| Metrology procedure(s)* | Establish and maintain | 7.1.1(g) | |
| | Amend and publish | 11.78.6(a)(iii) | 1 April 2016 |
| Service level procedures | Establish and maintain | 7.1.1(g) | |
| | Amend and publish | 11.78.6(a)(i) | 1 April 2016 |
| Procedures for minimum services specification | Establish, maintain and publish | 7.8.3(c) and (d) | |
| Market Settlement and Transfer Solution Procedures | Amend and publish | 11.78.6(a)(ii) | 1 April 2016 |
| Meter churn procedures | Amend and publish | 11.78.6(a)(iv) | 1 April 2016 |
| RoLR Procedures | Amend and publish | 11.78.6(a)(v) | 1 April 2016 |
| B2B arrangements | By IEC, amend and publish<br>(To comply with B2B principles and objective) | 11.78.6(e) | 1 April 2016 |

| Instruments | Action | New rule ref. | Completion Date (if known from Draft Determination) |
|---|---|---|---|
| NEW | | | |
| Document to record specific site and technology-related conditions | Develop and publish | 7.8.12(c)(1) | Not specified |
| Emergency priority procedures | Develop and publish<br>(or incorporate in service level procedures) | 11.78.6(b)(i) | 1 April 2016 |
| Procedures relating to the minimum service specification in accordance with clause 7.8.3(c) of new Chapter 7. | Develop and publish<br>(or incorporate in service level procedures) | 11.78.6(b)(ii) | 1 April 2016 |
| Categories of registration | Establish categories of registration for MPs for Types 1 to 4A and 4S as per schedule, "or other procedures approved by AEMO" | S7.2.2 | 1 Oct 2016 |
| Categories of registration | Establish Accredited Service Provider categories of registration | | 1 Oct 2016 |
| Registration process for MCs | Develop and publish | 11.78.6(d) | 1 October 2016 |

The IEC advice to the AEMC was to encourage a single release of metering competition, embedded networks, and shared market protocol. This would necessitate the following additions to the table above.

| Instruments | Action | Pending rule ref. | Possible Timing |
|---|---|---|---|
| EXISTING | | | |
| Embedded Network Guideline | Amend and publish | 7.16.7 | Query - 1 April 2016 |
| NEW | | | |
| Embedded Network Service Level Procedure | Develop and publish | 7.16.3 | Query - 1 April 2016 |
| Embedded Network Registration | Develop and publish | 2.5.1 | Query - 1 Oct 2016 |
| Embedded Network Accreditation | Develop and publish | S7.7.1/7.16.4 | Query - 1 Oct 2016 |
| SMP Procedures | Not yet clear – see pages 183, 184 of Draft Determination | Details not yet incorporated in existing or proposed Rules | Not yet clear |
| B2B registration | Amend and publish | | |

The Victorian DNSPs are unclear re the time schedule for the COAG draft NECF changes (**NECF 2**) for smart meter customer protections. The IEC program assumed that these also would be coordinated with the metering contestability, embedded network and SMP rules changes.

# 8. Technical decisions in competitive metering environment

The Victorian DNSPs ask the AEMC to reconsider governance arrangements for detailed technical decisions in the new competitive metering environment. This request goes beyond the AEMC's assessment criteria to consider best practice in governance and regulatory design.

**Overview**

The draft rule determination tasks AEMO with developing many detailed technical matters that AEMO is not well placed to do, and which fall outside AEMO's areas of expertise and responsibility.

The Victorian DNSPs ask the AEMC to apply principles of good governance, to draw on international smart metering reforms, and then to carefully reconsider effective options for governance of detailed technical decisions.

This matter is of particular concern in Victoria, where technical details can undermine significant investment in existing network solutions, to the detriment of customers.

## 8.1 Fundamental market changes

Historically AEMO has been well placed to oversee development and implementation of metrology procedures in an environment where:

- the focus of metrology was on electricity flow measurement to support AEMO's operation and settlement of the wholesale market;
- technical decisions were often achieved by consensus; and
- meter provision and operation were bundled with network services.

The AEMC acknowledges that with technological innovation, meters can now do much more than just measure the flow of electricity.[36] The new competitive metering environment will see:

- **new drivers for technical standards** and meter functionality;
- **meters supporting three different roles**, i.e. metrology, customer products and services, and network control and management services;
- **unbundling** of meters from network service providers;
  - new roles and entities involved, with new relationships;
  - different - sometimes competing - incentives and drivers on those entities;
- **new coordination requirements;**
- **new and emerging value in markets beyond the wholesale market;**

[36] Page 2 of the draft rule determination.

- new services that retailers and distributors want are not part of the NEM, nor driven by NEM billing and settlement.

The AMEC's draft rule determination tasks AEMO with developing technical details. We note that, at least in relation to the shared market protocol, the AEMC acknowledges different governance models for some technical decisions required in this new market context. [37]

## 8.2 Implications for governance and regulatory design

The Victorian DNSPs have given strong consideration to the decisions required to make this competitive metering reform work, and skills and resources required to make those decisions. These decisions will shape development, implementation and ongoing maintenance of new technical arrangements.

The draft rule determination assumes the adequacy of existing NEM entities to manage and implement these complex technical reforms. However, we believe that a fundamental review of governance for technical decisions is warranted, recognising the major changes that will occur. The emerging questions for the NEM include:

- Whether AEMO is best placed to make necessary decisions, especially for matters that go outside its core interest and responsibility;
- Whether network stakeholders most affected by, or interested in, technical decisions have an appropriate ability to inform and influence them, to support achieving the NEO;
- Conversely, whether stakeholders that are *not* affected by technical decisions can unduly influence them, to the detriment of the NEO.

Evidence from the United Kingdom suggests comparable smart meter reforms considered in depth the associated governance implications, and resulted in quite different fit-for-purpose technical governance arrangements being implemented, from those that previously applied.[38]

### 8.2.1 The Great Britain case study

Great Britain had a supplier led meter roll out, with the same reform objectives as Power of Choice. The governance philosophy adopted was one of industry self-governance.

Great Britain created a Smart Energy Code (SEC), a multi-party agreement that defines the rights and obligations of energy suppliers, network operators and other relevant parties involved in the end to end management of smart metering in Great Britain.

The SEC is self-governed and is managed by a SEC Panel with oversight from the regulator, Ofgem. A new Data and Communications Company established and manages the smart metering communications infrastructure, governed by the Smart Energy Code. **Importantly, the Data Communications Company is separate from the market operator.**

[37] See AEMC, Implementation advice on the shared market protocol, Stakeholder Workshop, 15 April 2015, at slide 14.
[38] See https://www.smartenergycodecompany.co.uk/

The objectives of the Smart Energy Code are to:

- Facilitate the efficient provision, installation, operation and interoperability of smart metering systems at energy consumers' premises within Great Britain;
- Enable the Data Communications Company to comply at all times with the objectives of the Data Communications Company and to discharge the other obligations imposed upon it by the Data Communications Company Licence;
- Facilitate energy consumers' management of their use of electricity and gas through the provision of appropriate information via smart metering systems;
- Facilitate effective competition between persons engaged in, or in commercial activities connected with, the supply of energy;
- Facilitate innovation in the design and operation of energy networks to contribute to the delivery of a secure and sustainable supply of energy;
- Ensure the protection of data and the security of data and systems in the operation of the Smart Energy Code;
- Facilitate the efficient and transparent administration and implementation of the Smart Energy Code.

The Data Communications Company, energy suppliers and network operators are required by licence to become a party to the Smart Energy Code and comply with its provisions. Other bodies who wish to use the Data Communications Company's services must also accede to the Smart Energy Code.

### 8.2.2 The New Zealand case study

Conversely, in New Zealand arrangements were left to the competitive market to develop, with no targeted governance review, and a small number of guidance documents.[39]

The resulting technology does not deliver 30 minute data to every distributor, nor offer anything more than basic automatic meter reading and remote disconnect services. There was no requirements for storage and delivery of 30 minute data[40] (instead, using six defined time periods, the GA Registers), nor was there any obligation for the provision of a home area network (HAN) functionality.

Half-Hour recording, demand response, display management, etc. are all optional extension services, rather than essential services (the latter being limited to a Master Accumulation Register, six General Accumulation Registers, Existing HWC Control interface and HAN Interface provision).[41]

The Electricity Authority[42] defines minimum requirements for AMI Systems in New Zealand. Under 'Terms, conditions and pricing of services' in section 12 of its guideline, it states, "Advanced

[39] The Electricity Authority provided guideline on "Advanced Metering Infrastructure" and "Advanced Metering Policy" while the Electricity Commission provided advice and policy suggestions to Government on the Rollout Requirements of "Advanced Metering Infrastructure in New Zealand".

[40] See The Electricity Commission "Advanced Metering Infrastructure in New Zealand – Rollout Requirements" identified in table 2 in appendix 2 "International comparison of Advanced Meter Functionality".

[41] See Electricity Authority "Guidelines on Advanced Metering Infrastructure" in figure 1 "Defining Open AMI Infrastructure – The Encapsulation Model".

metering infrastructure owners and operators should have standard terms and conditions, and price schedule of charges for the use of common attributes on their systems" and in section 13, "Where a user requests an enhanced service level or development of the advanced metering system infrastructure, the cost of this may be subject to terms, conditions and / or individual pricing as negotiated between the parties". However, section 14 states that, 'The terms and conditions and price for use of the same attributes should apply to all users'.

In reality, the New Zealand AMI Rollout has not delivered network services to the 26 distribution businesses, and has largely deployed an automatic meter reading system.[43] One NZ distributor has resorted to rolling out a Victorian style mesh radio AMI system to create capabilities like those of a network device.

As confirmed in the AEMC's Draft Decision workshop, as of 2015, there are *no* framework agreements in place between any of the market based metering businesses and distributors. Optional extension services (equivalent to the NEM's proposed secondary and value added services) have not eventuated. The regime where we understand the retailer-MC arrangements are exclusive, has thus eliminated the benefits for other players.

If long term benefits – including network benefits – are an objective of competitive metering reforms, then the NZ governance and regulatory arrangements should not be seen as reflecting best practice.

## 8.3 Lessons for the NEM metering reforms

There is a difference between governance required when making incremental changes, compared with that for a major reform, such as the Power of Choice and competitive metering reforms. The AEMC and policy makers should learn from international reform experience, and not assume the adequacy of existing entities and regulatory instruments to manage and implement complex technical reforms.

There are lessons from Britain on governance, objectives and strategic thinking that Australia should consider for technical aspects of competitive metering in the NEM. Though the NEM might adopt a different model, policy makers should at least understand the British model in detail, consider other approaches and models, and then develop a governance model that will work best for the NEM.

Though the draft rule determination considers roles and responsibilities, it does so within the current governance paradigm. In our view, a more fundamental review is warranted, and necessary, to achieve the desired reform outcomes. This is especially so in the area of detailed technical matters.

We think that a more fundamental governance review may result in a change to AEMO's allocated roles and responsibilities under Chapter 7 of the National Electricity Rules. Until such a governance review occurs, the additional guidance outlined in Section 5 below assumes even greater relevance and importance.

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[42] The former Electricity Commission was succeeded by the Electricity Authority in November 2010.

[43] As reported by the Electricity Authority at the Smart Energy Forum in Newcastle NSW in November 2014, as of that time, the New Zealand market has rolled out 1.2 million smart meters of its 2 million ICP identifiers (NMI equivalent).

# 9. Ring-fencing

Our greatest concern with the proposed ring-fencing guidelines is a preconception that there needs to be operational and functional ring-fencing which will require significant effort and costs to achieve for the Victorian DNSPs. This will potentially be driven by the AER's perception that there is a need for ring-fencing to remove the advantages that network businesses have, in terms of scale and scope efficiencies, in order to promote competition and the long term interest of customers.[44] The Victorian DNSPs consider that this perception is incorrect.

In terms of the AEMC's assessment criteria for these rule changes, these concerns affect competition, and administrative burden and transaction costs. They also address important principles of best practice in regulatory design.

**Overview**

We ask the AEMC to leave the making of a ring-fencing guideline discretionary, not mandatory

Further, if a ring fencing guideline is made, the AER should be bound to:

- Observe appropriate objectives and principles (section 7);
- Consider that ring-fencing and other regulatory interventions are not designed to remove all business advantages (including scale and scope efficiencies);
- Apply best practice regulation to ensure that benefits outweigh costs. This means considering:
  - benefits to customers from the long term efficiency of energy networks (in terms of sharing in the scale and scope efficiencies that networks provide);
  - the costs of implementing operational ring-fencing requirements;
  - the types of behaviours that DNSPs could engage in that would operate to the detriment of competition and customers in the market, recognising that DNSPs would not benefit in the same way as retailers or other parties (in terms of access to information and their competitive position in related markets) from also being the MC or MP; and
- Recognise the Victorian starting point is different, and allow an orderly transition for compliance.

## 9.1 Reasons for constraints on guideline scope

In developing ring-fencing arrangements for competitive metering services, the Victorian DNSPs consider that the AER's intention should be to ensure that customers receive the greatest net benefit from these competitive reforms through lowest sustainable metering service prices (including leverage network scale and scope efficiencies), and that the arrangements reflect an appropriate transition for the Victorian DNSPs.

[44] AER, Position Paper - Electricity Distribution Ring-fencing Guidelines, September 2012, p2.

Whilst the AER is expected to adopt the COAG principles of best regulatory practice when developing its ring-fencing guideline, the Victorian DNSPs request the AEMC to include:

1. an obligation on the AER that it must consider:
    a. the types of behaviours that DNSPs could engage in that would operate to the detriment of competition and customers in the market
    b. the extent to which existing NER provisions, such as cost allocation requirements, addresses cross-subsidisation of contestable services
    c. the extent to which an obligation on DNSPs to provide equal access to information would achieve some of the objectives of ring-fencing and therefore reduce the need for additional ring-fencing requirements
    d. the costs of implementing the measures and the effectiveness of these measures
2. an obligation on the AER that it must distinguish between actions that distort competitive markets and natural competitive advantages, and that its ring-fencing guideline only deals with distortions in competitive markets.

Also, the Victorian DNSPs believe that it is unnecessary and inefficient to make development of ring-fencing guidelines mandatory (rather than discretionary, as it is currently). The AER already has full discretion to make the guideline mandatory. The AER can make that decision in light of the broad range of other regulatory powers at its disposal for the regulation of distribution services.

### 9.1.1 Achieving the greatest net benefits for consumers

We note some stakeholder's and AEMC's valid concerns that a DNSP may cross subsidise services or achieve commercial advantages if the DNSP acts as a MC, MP or MDP. The AEMC's propose solution is that this is dealt with through the AER's yet to be developed ring-fencing guideline.

We note that DNSPs must comply with the following current regulatory requirements that address ring-fencing issues:

- Service categorisation to distinguish between competitive, potentially competitive and monopoly services;
- Cost allocation provisions to ensure that costs are properly allocated to each different service category;
- Related party provisions to ensure that a network company cannot favour a related party in procuring competitive services (such as vegetation management);
- Shared asset provisions to ensure that customers of the regulated business enjoy a cost reduction if regulated assets are used to provide unregulated (competitive) services;
- Regulatory information notice requirements.

Any additional ring-fencing obligations imposed on the businesses as part of the AER guidelines need to take into account the COAG principles of best regulatory practice, which include:

- Establish a case for action before addressing a problem;
- Adopt the option that generates the greatest net benefit for the community; and
- Ensure that regulation remains relevant and effective over time.

The development of new ring-fencing guidelines must also recognise that regulation is not cost-free. If DNSPs face additional costs as a result of new ring-fencing obligations one or both of the following outcomes would arise:

- DNSPs will seek recovery of the additional costs; and
- DNSPs may be unduly restricted from participating in some competitive markets.

Neither outcome is in customers' interests because each would result in higher prices and less intensive competition. It must also be recognised that DNSPs will not offer some services to customers if unnecessary ring-fencing obligations are imposed, which in turn will have a detrimental impact on the competitive market.

In assessing stakeholder concerns, the AEMC identified[45] that the AER may wish to consider the following matters when developing the guideline:

- the types of behaviours that DNSPs could engage in that would operate to the detriment of competition in the market
- the extent to which existing NER provisions, such as cost allocation requirements, achieve some of the objectives of ring-fencing and therefore reduce the need for additional ring-fencing requirements
- the costs of implementing the measures and the effectiveness of these measures.

We believe that the AEMC should place an obligation on the AER that it must consider the above matters if it elects to develop a ring-fencing guideline.

### 9.1.2 The economic regulatory framework

From a regulatory perspective, it is important to distinguish between:

- distortions in competitive markets resulting from impediments such as market structure, barriers to entry or an absence of competitive neutrality; and
- natural competitive advantages that may arise from synergies, economies of scale or low transaction costs.

[45] AEMC draft Rule Determination, National Electricity Amendment (Expanding competition in metering and related services) Rule 2015, 26 March 2015, page 236.

As noted in the report[46] of the Competition Policy Review led by Ian Harper AO, which discussed jurisdictional competitive neutrality policies in the context of government business activities:

*Each jurisdiction has developed its own competitive neutrality policy, guidelines and complaint-handling mechanism (some are handled by independent units; others by regulators or departments).*

*Although there is some variation, the policies require government business activities to charge prices that fully reflect costs and to compete on the same footing as private sector businesses in terms of taxation, debt, regulation and earning a commercial rate of return. The principle of competitive neutrality does not extend to competitive advantages arising from factors such as business size, skills, location or customer loyalty. [emphasis added]*

Firms in any market may have a range of advantages over their competitors and broader competition policy does not seek to remove these advantages without an understanding of their impact on the competitive process or the long term interest of customers. As noted by the ACCC recently:

*"They [competition policy] must also, of course, allow firms with market power to compete on their merits, including using the advantages that come with their scale and experience".*[47]

The NEL and NER do not direct the AER or AEMC to seek to establish a level playing field by excluding DNSPs from participating in markets where they may have a natural competitive advantage. Instead, the regulatory framework has been designed to ensure that customers are protected from monopoly pricing where there is an absence of effective competition. This approach ensures efficient outcomes, whereas an approach that prevents DNSPs from participating in competitive markets will not.

In particular, productive, allocative and dynamic efficiency in the new and emerging markets for energy services are undermined if DNSPs are excluded from them. If DNSPs are able to achieve economies of scale or scope to deliver lower prices to customers, it is important that customers obtain this benefit. Moreover, the skills and expertise of DNSPs may position them to provide innovative solutions and service offerings to address the changing needs of customers. Excluding DNSPs from these markets (or imposing additional costs of entry through ring-fencing obligations) will deny customers these better outcomes.

We believe that the AEMC should provide Rules-based guidance to the AER, requiring it to consider the following matters in considering whether or not to make ring-fencing guidelines:

- Competition policy objectives and principles, including recognising that ring-fencing and other regulatory interventions are not designed to remove all advantages that businesses have (including in terms of scale and scope efficiencies)
- Best practice regulation, to ensure that in evaluating the spectrum of regulatory settings that might be applied to different competitors in the newly contestable metering market, the benefits of additional regulatory intervention would outweigh the costs

[46] Competition Policy Review, Final Report, March 2015, Professor Ian Harper, Peter Anderson, Su McCluskey, Michael O'Bryan QC, page 255 & 256.

[47] ACCC, Bringing more economic perspectives to competition policy & law – Rod Sims speech, 7 November 2014.

- The benefits to customers from the long term efficiency of energy networks (in terms of sharing in the scale and scope efficiencies that networks provide).

## 9.2 Ring-fencing transition plan

We also ask the AEMC to require the AER to transition the commencement of the guideline, commensurate with the effort required to implement any additional ring-fencing obligations.

The Victorian DNSPs are in a unique position compared with other DNSPs. We have developed systems and processes, and incurred significant associated costs, to support the Victorian mandated smart meter roll-out as a regulated service. This means that the Victorian DNSPs systems and processes that support direct control services, including metering related services, are intertwined. Any decision by the AER for operational and functional separation will necessitate significant costs, and will require careful transition.

There would appear to be no corresponding benefits in compelling separation at Day 1, when the Victorian DNSPs are required to continue in the MC, MDP and MP roles. For example, indicative costs for one Victorian DNSP to achieve operational and functional separation are in the order of $7.5 million.

In our view, for Victorian DNSPs, the existing economic regulatory framework that is locked in until 2021 is adequate. Under that framework, the AER has classified the Victorian DNSPs' type 5, 6 or smart meter metering services as follows:

- *Alternative control service* - if the service is a restoration service provided in accordance with AEMO's metrology procedure applicable to Victoria, or if the service has been provided by the DNSP since a time when the derogation in clause 9.9C of the NER was in force.[48]
- *Unregulated service* – the installation, operation, repair and maintenance, and replacement of type 5-6 metering installations (including smart meters) to new[49] customers following the expiry of the derogation.

In providing the unregulated services, the Victorian DNSPs must comply with the current regulatory requirements that address ring-fencing issues.

The AER should determine whether or not the existing obligations provide the necessary safeguards, or can be modified to do so. A requirement to comply with any new additional ring-fencing obligations should be transitioned commensurate with the implementation effort required.

[48] This covers (1) the installation, operation, repair and maintenance, and replacement of type 5-6 metering installations (including smart meters), (2) meter exit services, (3) meter restoration services, (4) Meter investigation, (5) special meter read and (6) re-test of type 5 and 6 metering installations (including smart meters) for first tier customers with annual consumption greater than 160 MWh.

[49] A 'new customer' includes an existing customer who elects to replace an existing meter.

# 10. Customer protections

The Victorian DNSPs are not confident that the AEMC's proposed consequential changes to the NERR (and in the case of Victoria, other relevant instruments) work to protect customers, potentially resulting in unacceptable outcomes.

In terms of the AEMC's assessment criteria for these rule changes,[50] these concerns affect system integrity.

**Overview**

We are concerned at the potential for:

- compromised safety;
- delays in timely restoration of supply;
- confusion about accountability and notifications affecting life support customers;
- unnecessary services and charges.

The regulatory framework should apply the same compliance and reporting obligations regardless of who is organising the metering.

We ask the AEMC to establish an appropriately skilled multi-disciplinary working group to carefully and systematically test and draft new rules, to ensure that existing customer protections are not eroded.

This is one area where our brief review has highlighted important and unintended consequences of the rules as drafted. These are raised as examples only, to highlight the need for rigorous testing of proposed rules with the industry and lawyers.

**By considering the detail, the potential for inefficient costs and customer inconvenience becomes apparent.**

## 10.1 Anomalies, inefficiencies, conflicts

The AEMC proposes a new clause NERR 91A (or equivalent amended Victorian instruments) to ensure that the MC and DNSP provide reasonable assistance and cooperation. NERR 91A (a) specifically references NERR 90 and 91 re notification of customer interruption and 91A (b) references effecting interruptions for meter works by the MC. The expectations appear to be that the DNSP will have the major role and responsibility with respect to meter changes driven by the retailer MC for interruption notification and physical interruption

The Victorian DBs consider that there are more effective and efficient approaches to achieve these outcomes than to involve the DNSP in a process largely driven by the MC's requirements and timeframes.

[50] These assessment criteria are described in section 2.3 at page 25 of the draft determination.

There are a number of anomalies, inefficiencies, conflicts and questions with respect to the process as would be driven by the Rules as drafted.

Examples include:

- Sub clause (b) is unclear about the circumstances where the distributor must effect the interruption and provide assistance to enable the metering coordinator to carry out the meter exchange or repair.
- The MC or Retailer notification to the customer for a new deployment allows an 'opt out' within the 3 business days of the specified exchange date, yet the DNSP must provide at least 4 clear business days notification in writing to the customer.
- The Retailer needs to request a physical de-energisation and re-energisation of the DNSP via B2B. However, this needs to be coordinated and cannot occur unless the customer has remained as an 'opt in' customer, or if the DNSP notification has already been provided.
- It is not clear whether or not the DNSP must coordinate the Retailer's MC to generate an efficient program of meter replacement work
- It is not clear whether a DNSP which has undertaken the fuse pull must wait on site for the MC's MP resources to complete the work. There is a disconnect between the DNSP's obligation for timely restoration of supply to the customer, while not managing the resources actually undertaking the work.
- DNSPs should not be liable for the quality and safety of the MP's work, when the DNSP has no contractual arrangement with that MP.
- If the MP has left the site, then the DNSP is not in a position to fix any wiring issues.

## 10.2 Proposed way forward

Efficiency and workability would benefit from the AEMC (or the proposed working group) considering in greater detail the following matters.

1. In relation to planned maintenance:
    a. Afford small and large customers the same level of customer protections and notifications in writing for planned or routine maintenance of metering equipment consistent with previous policy decisions. Where the policy deliberations have changed, then the equivalent distributor obligations should also be removed.
    b. Afford life support customers the same level of timely notification of an interruption for the planned or routine maintenance of metering equipment regardless whether the distributor or the retailer is managing the metering installation.
    c. The regulatory framework should apply the same compliance and reporting obligations *regardless* of who is organising the metering.
    d. DNSPs should also be notified when planned maintenance is occurring at a premise; this may help them to better provide customers with supply information if the interruption can more quickly be attributed to the electricity network or the Retailers actions.

2. Customer protections in relation to transparency of service provision and price to consumers and in relation to discriminatory services and price in relation to remote energisation services.
3. Amending the NERR and the NERR Schedule 1 contract to provide that representatives seeking access to a premise need to comply with energy laws, carry or wear official identification and show the identification if requested.

Appendix E expands the basis of a more sensible and efficient approach.

# Appendix A – Base level metering data and meter service requirements

***Uncertainty of the base level metering data requirements***

There are a number of rules within the revised Chapter 7 which relate to the retention of, and access to, metering data including:

- Clause 7.10.2(h) specifies the MDP need for transfer facilities for *metering data*
- Clause 7.10.6 specified obligation for *metering data* provision to AEMO (but not other parties)
- Clause 7.11.1(c) *metering database* (AEMO's Database) must include *metering data* and *settlements ready data*
- Clause 7.14(d) *metering data provision procedures* requirements for data provision to customers (or their authorised representative)
- Clause 7.15.5(a) limits the persons who may be granted access to *metering data*
- Clause 7.15.5(d) states that the MDP must ensure access is provided to *metering data* from the *meter data services database* only to persons in certain subclauses of 7.15.5(a)
- Clauses 7.16.3 and 7.16.5 regarding *metrology procedure* matters; in particular clause 7.16.5(a)(1)(i) and (vi) which state that the *metrology procedure* may clarify *meter data services* matters
- Clause 7.16.5(5) the *metrology procedures* may specify circumstances that type 4A, 5, 6 and 7 *metering data* can be used by DNSP to calculate distribution charges for purposes of clause 6.20.1(e)[51]
- Clause 7.16.6(c) *service level procedures* requirements for the processing and delivery of *metering data;* in particular clause 7.16.6(c)(3) performance levels of *metering data*, and
- Schedule 7.5.1 *minimum services specification* defines a service which is provided to requesting party (who can be any of the parties in clause 7.15.5).

However, whilst these clauses provide support for the provision of metering data to stakeholders, none of these clauses appears to clearly oblige the MC (or their MDP) to provide metering data to any party, except for AEMO under clause 7.10.6. This means that:

- any party can request metering data
- only those parties listed in clause 7.15.5(a) may be provided with metering data, but
- the rules have no clear obligation on the MC to provide that data or to provide a commercial offer to provide that data.

[51] The concept of settlements ready data being used for network billing is a hangover from when the MDA's (now the MDP's) were agents of AEMO and their data base of metering data was part of the AEMO metering database. This is no longer the case and distributor billing of all customers on type 1-7 meters is based on data from the MDP's metering data service database not the metering database. Therefore, the AEMC's draft rule change needs to clarity the basis of network billing by revising clauses 6.20.1(e) and 7.16.5(a)(5).

Further, we note that the AEMC's draft rule change appears to remove any obligation to provide data to stakeholders from the current Chapter 7 requirements. For example, the current clause 7.7(c) is:

> The *responsible person* or *AEMO* (as the case may be) who is responsible for the provision of *metering data services* must ensure that access is provided to *metering data* from the *metering data services database* to persons eligible to receive *metering data* in accordance with paragraph (a)

The proposed redrafted clause 7.7(c) is:

> (d) The *Metering Data Provider* or *AEMO* (as the case may be) who is responsible for the provision of *metering data services* must ensure that access is provided to *metering data* from the *metering data services database* only to the persons referred to in subparagraphs (a)(1) to (6) and (a)(11).

New draft clause 7.7(c) is now written as a reinforcement of the restrictions as to who can receive metering data as listed in clause 7.15.5(a) rather than as some level of obligation to provide metering data.

***Victoria's minimum performance standards and service levels***

Despite not having clear obligations in the rules for metering data provision, the Metrology Procedure and the Service Level Procedure (**SLP**) assume a metering data delivery obligation on the responsible person and their MDP to deliver metering data to DNSPs, to the FRMP and Local Retailers.

However, there is no clarity on the metering performance standards and service levels that are yet to be developed in procedures. Further, reservations are compounded where AEMO is using new terminology with unknown meanings such as meter read cycle date, or next scheduled read, or date in a relevant code representing the read cycle data.

The Victorian DNSPs should be provided with the same level of services and performance standards as are included in the current metering data arrangements in Victoria, the cost to provide these services being included in the one metering charge paid by the FRMP.

For example, the current Victorian base level metering requirements include:

- Validation and verification of metering data which are not charged separately. Given the uncertainty of the new manually read meters in the remote read meter category and the varying manual meter read arrangements that the draft rule introduces, we expect that the request to verify or provide metering data are provided as part of the base level metering data. Whilst we are not suggesting that the AEMO will remove the current SLP obligation for metering data delivery, or revise the B2B Data Procedures that define the obligations for the processes and transactions associated with metering data delivery, nevertheless we consider that a policy position on the delivery of these fundamental services should not be left to the procedures, but rather should be in the rules and subject to full AEMC consideration if changes are proposed.

- Efficiently responding to customer off-supply calls. We cannot efficiently respond to customer off-supply calls if we cannot access services from the MC to check the meter status. Consequently, the customer, via the retailer, is likely to pay for wasted truck visits from DNSPs where the off-supply is not a result of a network fault. This is an adverse outcome for customers where a lower cost solution should be available via guaranteed access to meter services from the MC. Providing access to meter supply status would be in the long term interests of customers and would seek to avoid a two tier customer system. Access to this near real time supply status service without the need to negotiate for price/terms and conditions should be provided for in the new framework.

Lastly, our understanding of the draft rule is that DNSPs can only retain or deploy network devices for the purposes of monitoring the network. Therefore, installing or retaining a network device does not provide a by-pass option for the provision of core services, such as those set out in the table below. There is no other by-pass option available for the receipt of validated metering data, consequently it is reasonable to expect that the MC as a monopoly seller of an individual customers metering data and will have both the ability and incentives to charge well above cost prices, particular for metering data which DNSPs require to meet mandatory obligations and have no other alternative information source.

***Victoria's minimum metering data and meter service requirements***

Where DNSPs are obligated to provide a service to retailers, customers, the regulator and/or the market, the MC must be obligated to provide the necessary data, i.e. a regulated requirement to provide the service. Failure to require the MC (or their MDPs) to provide the meter data service could lead to DNSPs being unable to meet their regulatory obligations or alternatively being required to pay an uneconomic price given potential market power of the MC (see section 5). Economies of scale are more likely to be achieved if the retailer contracts and pays the MC for all data requirements that meet the minimum service specification and DNSP regulatory obligations.

The minimum metering data and meter service requirements for Victorian DNSPs (other jurisdictions may require a different set of requirements) to be provided as part of the core metering data services and metering data requirements at no additional charge based on the current service levels are set out below.

| DNSP data requirements | Rationale | Customer impacts |
|---|---|---|
| Continuity of existing datastream level data in the MDFF for all meter types<br>Metering data suitable for billing e.g. provision of meter datastream level e.g. two element metering two datastreams, load and generation datastreams not net data (AEMO settlement data)<br>SLP MDP 1-7 6.11.2 MDP must provide ALL actual metering data | Continued billing obligation as per UOSA<br>Maintain consistency/ continuity of billing/ network tariff | Avoids forcing network tariff change on customer, impact retailer contract and customer choices<br>Avoids increased level of cross subsidy from non EG to EG customers with an increased free rider effect if networks forced to use AEMO settlement data |
| Continuity of MDFF files, file frequency – commensurate obligations as per current practice<br>Maintain read frequency of AMI meters to be daily data delivery as per current DB and RB licence obligations, Vic AMI Service level spec, 4.3<br>Read frequency decisions for manually read customers need to be agreed with DNSP, continuity maintained, NMP 3.4.10<br>Above obligation needs to extend to type 4a by extending above clause i.e. the equivalent of NMP 3.4.6 and 3.4.7 | Victorian network billing processes established to bill monthly based on daily provision AMI data<br>Victorian network billing process triggered by NSRD, meter read is available +/- 2 business days from NSRD and must be provided into the metering data services database (NMP 3.4.9) and the provision of validated read data within 2 bus days of data being received into the metering data services database, SLP MDP 1-7, 6.11.2 | Maintain current billing and cash flow for distributors<br>Provide a mechanism to seek out data when not provided e.g. PMD |
| Meter data quality – request meter data in a consistent manner to the way retailers request data today – PMD, VMD | Ensure latest data version and respond to data request/billing queries | |
| Customer no supply – respond to customer call to fault line<br>Causes – remote de-energisation, meter maintenance/meter exchange, meter fault or network supply issues, DBs must have timely free notification of customer off supply<br>The DB will need to differentiate between a supply interruption and a remote de-energisation or supply limit by the MC, best endeavours to restore supply asap, DB Code 5.4.1 (c) | Seek to provide best customer outcome and avoid a wasted truck visit, minimise the difference between DB metered customers and DB non metered customers | Avoid wasted truck visits for the non LNSP-MC customers, these are hidden costs to the customer |
| Real time voltage alarm – Meter settings filter voltage excursions within a band and send real time voltage alarm, bands and service level as per Vic AMI MIN Functional Spec, 3.8 | Maintain voltage within the DB Code tolerance limits, clause 4.2<br>Manage safety or wiring type issues quickly with a trouble order<br>Manage low voltages on the network to maintain compliance and minimise claims and complaints | Regulatory compliance DB Code 9.1.5<br>Manage safety<br>Regulatory compliance and reduce claims |

# Appendix B – Victorian smart meters (type 5) beyond the derogation

### B1 Grandfathering of AMI meters as type 5

The AEMC draft determination makes it clear that the LNSP that is acting as the Responsible Person for type 5 and 6 metering installations immediately prior to the commencement of the new Chapter 7 of the NER will become the initial MC at that connection point. The DNSP will continue in that role until the retailer appoints a different MC to the site *or the services cease to be classified by the AER as a direct control service.*

The Victorian DNSPs support the AEMC proposal that the DNSP for the advanced meter roll out remain the MC until a new MC is appointed, however the proposed rules are not clear that the metering installations which are smart metered may remain as type 5.

The derogation provided clarity that a Victorian AMI meter could remain as a type 5 meter even where the data was collected daily remotely. The following clauses from NER, Chapter 9 provide that assurance of the meter classification.

*9.9C.4 Classification of relevant metering installations*

A relevant metering installation which, but for it being capable of remote acquisition, would be a type 5 or type 6 metering installation, is taken to be a type 5 or type 6 metering installation respectively.

*9.9C.6 Capability for remote acquisition of metering data*

For the purposes of clause 7.11.1(d), a relevant metering installation is taken not to have the capability for remote acquisition of actual metering data.

We consider that the AEMC's intent is that the Victorian AMI meters remain as type 5 metering installations and that they would continue to be identifiable to all parties with the read code RWD (remote wireless daily). However, the proposed rules do not make it entirely clear that Victorian AMI meters can remain as type 5 and at times AEMO has suggested that the Victorian DBs require type 4 accreditation.

The metering classifications in Table S7.4.3.1 which define the minimum acceptable standard for type 5 metering installations refer back to clause 7.8.2(a)(10), 200 day memory capacity for type 4a or type 5 meters and 7.10.6 (d) which refers to type 4a and metering installations which do not have remote capability.

We recommend that the Victorian AMI meters which are the subject of regulated metering arrangements, remain as type 5 and that a similar rule to 9.9C.6 is implemented in Chapter 7 or 11, and that this is achieved through a grandfathering provision.

**B2 Areas of uncertainty in new rules**

The proposed rules provide for deemed appointment of the DNSP in the MC role in 11.78.7. However, the deeming arrangements for the standard terms and conditions are less than clear. Draft rule 11.78.7 (h) states:

> *'(h) An appointment under paragraph (a) or a deemed appointment under paragraph (c) will continue until the earlier of:*
>
> *(1) the services provided with respect to the metering installation ceasing to be classified by the AER as direct control services[52];*
>
> *and*
>
> *(2) another Metering Coordinator being appointed with respect to that connection point under new Chapter 7.'*

The drafting appears to assume that the MC/MP and MDP roles all churn together and the deemed appointment and terms and conditions come to an end at the same time. In the recent changes to the AEMO Service Level Procedures these were amended to bring them in line with the NER. Until a Retailer is the Financially Responsible Market Participant, it cannot take on the Responsible Person (RP) role and appoint the MP and MDP. Until a Retailer is the FRMP in the market for that connection it cannot seek to alter the metering roles in the market. The incoming Retailer may seek to churn roles on the day it becomes FRMP in the market or at some time later.

Once the rules commence where an existing FRMP wishes to take on the MC role but does not seek to churn the metering roles, it is unclear whether this is still a regulated service, with the regulated exit fee and whether the meter continues effectively as a type 5.

Assuming the intention is that the deemed terms and conditions of the MC appointment survived the FRMP taking on the MC role with the initial deemed arrangements (and this is not clear), if the customer were to churn to another Retailer with a different MC, it is unclear how the proposed deeming arrangements would work.

We are concerned that the arrangements are deficient and seek to instil some version of commercial arrangement on DNSPs who have had to provide these arrangements as part of the regulatory framework to date. The proposed standard terms and conditions seem to be at odds with the transitional arrangements that the DNSPs will be faced with.

The deemed arrangements include standard terms and conditions for providing metering services. Such arrangements exist and are agreed notwithstanding the AER's ability to change a service classification from regulated (alternative control service) to unregulated.

[52] The Victorian DNSPs are unclear with respect to this additional phase. It would be our view that the DNSP must continue as the MC irrespective of the service classification until the retailer appoints another MC. The site cannot be left without an MC and the related service providers, i.e. the deemed/existing arrangements would continue.

# Appendix C – Practical difficulties to be addressed

This appendix describes:

Part A - Drafting problems that need to be addressed

Part B - Encouraging new technology and demand response options

Part C - Type 4A meter issues

## Part A - Specific drafting problems

Some specific issues with the content and level of detail in the draft rules are outlined below. As with other matters highlighted in this submission, these matters raised are not exhaustive. A rigorous review by a multi-disciplinary working group is likely to identify other important matters that should be addressed *before* final rule changes are made by the AEMC.

### C Part A.1 General capability requirements

The Victorian DNSPs are concerned that the level of detail in the definition of minimum services in the Rules does *not* provide adequate guidance to support the AEMC's expectations (or clarity on what the services and their related service measures entail), or to ensure that the expected policy outcomes can be achieved.

Schedule S7.5.1.1 states:

> **Minimum services specification**
>
> A *metering installation* meets the *minimum services specification* if it is:
>
> (a) capable of providing the services listed in table S7.5.1.1 in accordance with the procedures made under clause 7.8.3; and
>
> (b) connected to a *telecommunications network* which enables remote access to the *metering installation*.

The Victorian DNSPs consider these requirements are insufficient to ensure that the capability provided by the MC and its service providers can actually deliver the services listed in Table S7.5.1.1.

The requirements are broad and do not give sufficient clarity on important matters. For example, there should be a clear requirement for the End to End systems and hardware/processing power to support the capability to supply the services in the *minimum service specification (and to allow for the evolution of services)*, and the service measures in the AEMO procedure. Having a meter, telecommunication interface and a connection to a *telecommunication network* is not necessarily sufficient to deliver the services as expected, unless:

- the connection arrangements for the telecommunication network provides the capability and capacity to support the services; and
- the MC's service providers' systems also have matching capability and capacity to support the services.

**Suggested drafting amendments**

The Victorian DNSPs suggest the following additional wording to the criteria that the *metering installation* must exhibit in order to meet the *minimum services specification*. The *metering installation* and associated systems/infrastructure must be*:*

- capable of providing the services listed in table S7.5.1.1 in accordance with the procedures made under clause 7.8.3;
- connected to a *telecommunications network* which enables remote access to the *metering installation* and the *telecommunications network* has the capability and capacity to support the services; and
- controlled and managed by a system which has the capability and capacity to support the *minimum service specification* services, including any location based additional services as recommended in Section 1.

**Suggested changes to accreditation model – in line with current arrangements**

Further, we consider that the accreditation requirements for the MCs, MP and MDP service providers should ensure that this capability is in place.

Under the current model for metrology services in the NEM, the Responsible Person (**RP**) must ensure that metering services are provided consistent with the Rules and the associated metrology procedures. A significant obligation underpinning this outcome is that the RP must appoint AEMO-accredited service providers. Accreditation ensures that service providers have the systems, processes, resources, capabilities and management commitment to achieve the metrology outcomes. This regulatory approach to services outcomes (i.e. through the use of service providers accredited to have the necessary capabilities), has served the metrology requirements of the NEM and the market participants well.

The Victorian DNSPs consider that this same approach should apply to the assurance that the MC and their service providers have the required capabilities as specified in clause 7.8.3.

The current draft rules do little to ensure the service provider's capabilities in the provision of the services and service levels in Rules 7.8.3 and service measures in the related AEMO procedure. The only specific capability for services provided is with respect to security as defined in clause 7.15.4 for MPs and S7.3.4 for MDPs.

We consider that the capabilities of service providers as specified in the Rules should include the capability to provide the services in the *minimum services specification.* This is assessed as essential to ensure the MC has in place capabilities to deliver services specified in the Table schedule 7.5 of the NER.

**Additional ambiguity in draft rules**

We note that it is unclear whether it is the MC, MP or the MDP (or combinations of these) who must have the capabilities of smart meter services provision. To establish a service capabilities assurance regime and accreditation, it would be desirable to clearly identify which of the service providers will be accredited for these capabilities.

## C Part A.2 Inadequate detail to ensure expected capabilities, safety

The following are some examples of where the Distributors consider that the detail in Table S7.5.1.1 of the *minimum services specification* services lacks sufficient specification of the service to ensure that the outcomes of the development process for the service level procedure and the service details achieve the expected service capabilities.

**(i) Remote reconnection service**

In Table S7.5.1.1 the service "remote reconnection" as defined does not include the requirement that the reconnection service has an "auto-disconnect" safety aspect as defined in the Victorian AMI Functional Specification, and is the basis of remote re-energisation in Victoria.

The Victorian Minimum Functionality Specification states:

> 3.4.3.2 Remote reconnection
>
> (a) For safety, the meter shall support an auto-disconnect function if load is detected flowing through the meter upon remote closing of the supply contactor.

This feature of the reconnection service requires the service provider to determine any current flowing after the reconnection and, if this is above a set level for a set time, the customer's electrical installation is disconnected immediately. **Without this safety feature, premises, and potentially lives, are at risk.**

We note that the AEMO Secondary Services include a *Re-Energisation (arming of the meter)* service, to provide some level of safety by requiring the end-use customer to take direct responsibility for energising their meter. In Victoria this approach was considered during the development of the Victorian Minimum Functionality Specification, but the Victorian safety regulator (ESV) did not support a process where the safe operation was dependent on customers accessing their meter box and the main switch to carry out the required reconnection.

**(ii) Remote scheduled meter read service**

The Victorian DNSPs accept that the Rules are not the right instrument in which to specify the detailed service measures to be achieved by this, and the other *minimum services specification* services, but rather that these will be determined by AEMO in association with the industry and documented in a procedure.

However, we consider fundamental expectations of the services should be outlined in the Rules so as to constrain the potential of the service measures to restrict the benefits achievable from the service, and also importantly to ensure that the MC and its service providers' capabilities provide a reasonable basis for the ongoing development of enhanced services as envisaged by the AEMC.[53]

DNSPs expect the remote scheduled meter read service to deliver metering data at significantly better timeframes and completeness levels than the minimum weekly data delivery to meet the AEMO settlements timetable. Table S7.5.1.1 which defines this service should contain words to make this outcome clear. The DNSPs would expect metering data services levels – timeframes and completeness to be the same as the current Victorian obligations on the retailers today.

[53] These difficulties could be averted if the Victorian DNSPs proposals in section 6 are adopted.

Similar comments can be made with respect to the level of definition of the other *minimum services specification* services.

**(iii) Meter types, service capability and identification issues**

In the draft rules, the six AEMO primary services are introduced and defined within the Meter "Type" and service provider "Capability" rules within Schedules S7.2 , S7.3, S7.4 and S7.5 and specifically, in the clauses and associated tables of S7.2.2, S7.3.2, S7.4.3 and S7.5.1.

However the four AEMO identified 'secondary services' and four AEMO 'value added services' are not addressed at all within the Rules.

This submission proposes that existing Victorian regulated AMI Meters should be retained in the market as Type 5, to allow identification of their status via NMI discovery, and that a Victorian DNSP participating in the competitive metering market would install its new and replacement meters as Type 4.

However there is a NEM wide identification issue revolving around the "Type 4" meter. From market start, all "new and replacement" meters must be capable of delivering the minimum services (six AEMO primary services), yet other than relying on the "install date", such meters are indistinguishable within MSATS and the NEM with existing legacy Type 4 remotely read interval meters.

Further hidden is the status between an low voltage current transformer type 4 and a direct connected type 4, where neither a legacy or "new" LVCT type 4 will have any remote re-en/de-en capability, but a new direct connected type 4 "should" and a legacy direct connected type 4 is "unlikely" to be capable without further site visit and retro-fit.

AEMC and AEMO have foreseen the need to recognise the identification of type 4A Meters (referring to a meter that has the "capability of providing the minimum services, but is not yet remotely communicating"). AEMC and AEMO have foreseen the need to recognise the "capability" of service providers to undertake type 4, 4A and 4S "installations".

There is no such remedy to identify a NMI fitted with metering with legacy or full "minimum service" deliverable capability, or beyond that, to identify metering installations or service providers with capability beyond the minimum service specification (i.e. secondary and value added services). Also, it would seem these capabilities will not be discoverable within MSTATS, subject to any AEMO accreditation or performance auditing, or standardisation of functionality or protocol other than what may or may not be defined in a future shared market protocol, the regulatory framework for which has not yet been developed.

Rule changes should require AEMO, through its procedures, to better define and identify specific legacy and minimum service capability within MSATS for NMI discovery purposes, as well as to extend the MP and MC accreditation and auditing *beyond* the six minimum services, to additional industry agreed services (i.e. likely to be the four AEMO secondary services and four AEMO value added services). These additional services are would support the continued AMI benefits to the 2.8 million smart meters already installed in Victoria.

# C Part B - Encouraging new technology and demand response options

Victoria has rolled out rich functionality smart meters to all sub 160MWh per annum customers i.e. all customers below x and y. The proposed rule change only requires the new national smart meter for customers below 40MWhpa in Victoria. The drafting in 7.8.8(a) and Table S7.4.3.1 allow new connections in Victoria to adopt other than a smart meter and allow any existing metering to be replaced with a range of meter types for premises with 40-160MWhpa.

Therefore, the Victorian DNSPs recommend for customers consuming between 40-160MWh per annum:

- The drafting of clause 7.8.3(a) should reflect the SCER and EMRWG intent.[54]
- Victorian functionality smart meters should be the minimum standard for all meter exchanges sub 160MWh per annum regardless of who is MC, who selects the metering, and whether the meter replaces an old type 5 or 6, an AMI meter or a new connection.

*Background*

As drafted, Table S7.4.3.1 outlines the upper limits for use of various meter types in the NEM.

The upper limits for manually read meters historically have been established by the Minister of the jurisdiction, advised to AEMO and recorded in the National Metrology Procedure.

As currently drafted all new and replacement meters for small customers in Victoria (residential and business customers below 40MWh per annum) must be a type 4 meter that meets the minimum meter specification, i.e. they must be remotely read (clause 7.8.3(a)). Although by contrast the drafting in 7.8.8 (a) appears to leave the option more open.

The Rules introduce a new type 4a metering installation which is capable of meeting the new minimum metering specification but may be exempt from being remotely read if AEMO agrees that there is no existing telecommunications network available which enables remote access to that connection point. A type 4a meter is not limited to the traditional upper limit of a manually read interval meter which is governed by the jurisdictional Minister. As drafted nothing prevents manually read interval meters all the way to the 750MWh per annum limit.

| Residential | Business 0-40MWh per annum | Business 40-160MWh per annum | Business +160MWh per annum |
|---|---|---|---|
| Type 4 RRIM | Type 4 RRIM | Type 4 RRIM | Type 4 RRIM |
| Type 4a MRIM | Type 4a MRIM | Type 4a MRIM | Type 4a MRIM |
| | | Type 5 MRIM | |
| | | Type 5 RWD | |
| | | Type 6 | |

[54] SCER letter to AEMC, Rule change request, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, October 2013, p33.

Issues with the approach include:

- A Victorian business customer (above 160MWh per annum or above 40MWh per annum) could legitimately choose a type 4a meter from an MC, the discretion of the exemption rests with AEMO. This is inconsistent with the market approach that all new and replacement for above 160MWh per annum customers must only be type 4 meters.
- A new connection in the Victorian regulatory framework where it is a retailer or large customer selected MC/meter does not need to be a Victorian smart meter, nor does it need to be a type 4 meter where the connection is below 160MWh per annum.

These inconsistencies with the long standing approach of moving the market to remotely read interval meters and improving the market settlement accuracy and integrity should be avoided. They are inconsistent with the AEMC assessment framework to encourage competition in new energy products and services and the clarity of the roles, responsibilities and options available to customers.

The drafting in clause 7.8.3 (a) should be amended to ensure that any new or replacement meter (i.e. replacement of a manually read type 5/6 meter) in Victoria is at least a remotely read interval meter (a basic type 4 meter) for above 160MWh per annum customers and must be at least a Victorian AMI meter for all customers 160MWh per annum and below.

Replacement of manually read meters with a smarter remotely read meter is consistent with the current NER. Transitional arrangements in 11.36 were implemented to support the previous NEL provision which allowed a Minister to specify a smart meter roll out in a jurisdiction to replace all type 6, basic meters below the 'y' threshold. The Victorian DNSPs understand that the policy has moved to a market led mandated approach. However the principle of requiring replacement of manually read old technology should still be applied in these new rules and is consistent with the policy intent for encouraging a demand response.

The small customer thresholds used for customer protection are not appropriate if the intent is to encourage the technology and innovative new products to the broader customer segment i.e. where the intent of this rule is to encourage the displacement of manually read technology with smarter service capability and remotely read interval meters.

It also inconsistent with the 2013 SCER/EMRWG rule change request that enabled jurisdictional policy on new and replacement and which also enabled a jurisdiction to have different functions.

The SCER rule change request to the AEMC proposed the following jurisdictional discretion:[55]

> 5. Jurisdiction new and replacement policy
>
> 5.1 The final rule will provide that jurisdictions may define the functions of meters that must be installed in new and replacement situations.
>
> 5.2 Jurisdictions may require that new and replacement meters must meet or be capable of meeting the smart meter minimum functionality specification.
>
> 5.3 A jurisdiction may require that new and replacement meters provide some of the functions in the smart meter minimum functionality specification, or different functions.

[55] SCER letter to AEMC , Rule change request, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, October 2013, p33

The drafting as currently proposed is deficient and does not seek to encourage the richer metering specification. Therefore the Victorian DNSPs recommend that the drafting of clause 7.8.3 (a) reflect the SCER and EMRWG intent and that Victorian functionality smart meters are the minimum standard for all meter exchanges sub 160MWh per annum regardless of who is MC or who selects the metering and whether the meter replaces an old type for 5 or 6, a Victorian smart meter, or a new connection.

The drafting in 7.8.3 (a) must be amended to cover the new (or replacement) metering requirements for all Victorian customers 160MWh per annum and below. The meter specified in this clause for all relevant customer needs to be the Victorian minimum functionality specification otherwise there are 2.8 million customers with a functionally rich and consistent metering standard and the next new connection has a different metering standard which then impacts the benefits available for customers. One rationale for extending the Victorian derogation was to avoid this very diversity in metering arrangements for small customers.

The SCER rule change request to the AEMC also proposed the following:

> "The final rule should reflect that the smart meter minimum functionality specification defines, at least:
>
> - the functions that must be supported by a smart meter, and
> - the performance levels associated with each function."

Adoption of the Victorian minimum functionality specification also far better meets this intent than the minimalist minimum specification currently proposed. The Victorian specification better includes technical detail that can allow future evolution and capability in the meter and communications and is better suited to the evolving market. Clause 7.8.3(a) or a new provision in Chapter 11 should either reference the Victorian minimum functionality specification, or provide for a jurisdiction to have this flexibility (as intended by COAG).

There is no issue with metering consistency nationally as adopting this Victorian specification for Victoria does not imply that the specification cannot change or is set in stone. Any party is free to propose a change to the specification if there are aspects of the specification that are expensive or outdated and need to be removed. The specification does however provide more comfort that there is meter/systems capability to meet the future services.

# C Part C - Type 4A meter issues

Proposals for type 4a have not been adequately thought through, and create practical difficulties and inconsistencies. For example, the drafting has inadvertently picked up time clock accuracy for a type 4 (rather than for a manually read) meter. Some notes are missing, and provisions allowing adjustments to relax time clock accuracy for type 5 meters.

Therefore, for type 4a meters the Victorian DNSPs recommend:

- Type 4a upper limit should be a new z factor set by the jurisdiction in Table S7.4.3.1. Ideally this would be set in a consistent manner or level to the x and y, i.e. the same threshold, so that the impact on settlement accuracy and integrity remains unchanged.

- The AEMO exemption procedure should clearly apply to metering arrangements below the upper limit of x, y or z so that further manually read meters are not allowed in the above 160 segment of the market. Even if AEMO does exempt this situation (ie manually read above x/y), it would provide a more transparent framework.
- New meters that meet the minimum meter specification and are remotely read should be identifiable to all parties. This should be done in the Rules, by creating a new meter category, or closing off the old type 4 category for sub 160 customers and creating a type 4b.
- The Rules guide procedures and protocols amendments, to ensure that all type 5 obligations apply to type 4a meters.
- AEMC should correct the missing clock error note for type 5 and provide a similar note for type 4a.

| Meter Type | Description |
|---|---|
| 4 | Legacy Type 4 RRIM |
| 4a | Minimum Specification meter **without** remote communications<br>(AEMO primary services) |
| 4b | Minimum Specification meter with remote communications<br>(AEMO primary services) |
| 4b* | Primary and Secondary Services Meter with remote communications<br>(AEMO primary and secondary services) |
| 4b** | Primary, Secondary and Value added Services Meter with remote communications<br>(AMI Vic Spec capable Meter) |

**Numbering is illustrative only. The additional services need to be individually discoverable within MSATS.*

*Background*

Traditionally the Rules have allowed manually read meters, these are the type 5/6 metering categories and type 4 metering has always been the meter type for remotely read meters.

The current transitional arrangements in Chapter 11.20.3 already provide for any type 5/6 metering installation above 160 must only be replaced with a meter which is compliant with the current rules i.e. a type 1-4. This intent should remain and not be diluted via the apparent drafting in Table S7.4.3.1 which appears to allow for a type 4a meter to be utilised.

The upper limit for a type 4a should be established as a new "z" threshold in Table S7.4.3.1 and be consistent with the X and y for each jurisdiction.

The creation of a manually read type 4, i.e. a type 4a creates an identifiable category of a new meter which meets the NER minimum meter specification and has the capability of being remotely read but is not able to be economically remotely read. The Victorian DNSPs support transparency of a meter which has this capability by the creation of a new meter category, however whilst a type 4a is being manually read it would be better if it picked up and followed the well-considered framework already established for type 5 metering.

The drafting has inadvertently picked up the time clock accuracy for a type 4 compared to the time clock accuracy for a manually read meter that may be visited every 3 months or if no access 6 months or longer. The drafting in the table is missing the note 3a for the type 5 time clock accuracy which allows the metrology procedure to relax time clock accuracy for type 5s.

The framework seems at odds that a type 4 meter which may or may not have the minimum meter specification requirements and is remotely read, is not able to be identifiable compared to other old type 4 meters. This suggests that the .1% of type 4a meters needs to be segregated from other type 5 meters and yet the new minimum services meters do not need to be visible and transparent in the market. This does not facilitate aspects of the AEMC assessment framework in that the metering capability is clearly defined and other parties have sufficient information readily available to promote new products and services. This increases the level of administrative burden and transaction costs and is not in the spirit of encouraging competition in the new products and services.

There are a number of aspects across the manually read interval meter framework i.e. type 5 which need to be considered for a type 4a rather than just placing a manually read meter in the type 4 category with inadvertent consequences.

It is unclear from the drafting that certain aspects of the broader type 5 framework will be clearly picked up for type 4a. This does make a difference in the large volume of procedural work to follow if every point regarding a type 5 obligation or process needs to be debated for use for a type 4a.

Examples include:

- Type 5 register level data is provided in the MDFF, including for the benefit of sub 160 customers, start and end index reads. Index reads are not a requirement of type 4 meters.
- In the national metrology procedure metering routes and NSRD (next scheduled read dates) need to be maintained for all manually read meters. The read route frequency before/after the rule change should be maintained. Any change in the read frequency needs to be agreed with the FRMP and DB as this affects billing frequency and cash flows.

The Victorian DNSPs would expect meter read frequency to be maintained or agreed, and also customer protections on index reads to be maintained, irrespective of what a meter is called.

# Appendix D - Achieving network benefits – Victorian experience

Based on the Victorian experience, it takes time to achieve the benefits from smart meters.

The Victorian DNSPs are only starting to achieve benefits now, particularly those that relate to the AEMC's value added services, even though the AMI roll-out commenced in 2010. The predictable framework has been key to enabling benefits to emerge. Under the new rules, DNSPs must contract for value added services over a long enough time frame to realise the benefits: this becomes problematic when there is no certainty of the MC tenure under the proposed model.

This section sets out some examples of AMI benefits achieved in Victoria to date and further benefits being considered.

The Victorian AMI roll-out (which commenced in 2010) was based on a small number of services such as daily remote read, remote re and de-energisation, and meter configuration. It has taken considerable time to achieve some of these benefits. For example, remote re and de-energisation was only implemented in CitiPower/Powercor in late 2013 and achieved 90% take up by retailers by 2015. Implementation and use by retailers of this service has avoided and continues to avoid a significant number of truck visits.

As the meter roll-out neared completion, the Victorian DNSPs have been analysing and progressing other benefits by using the smart grid (i.e. value added services). These include:

- CitiPower and Powercor Australia:
  - implemented Meter Outage Notification for "Wide Area Faults" in late 2013 and is yet to fully implement functionality for "Single Premise Faults" as at April 2015;
  - are looking to supply capacity control and are awaiting revision of AS4777 before progressing DRED control of air-conditioning and photo voltaic generation devices;
- United Energy:
  - implemented the simple ping function as part of the delivered AMI solution which mainly required procedural changes to implement;
  - is in the process of using other AMI functions in relation to demand response initiatives e.g. supply capacity control;
  - are looking to implement meter outage notification later in 2015;
- AusNet Services:
  - have in place extensive applications of "5 minute" power quality data to enable detailed analysis of the network including:
    - phase identification which enables identification of phase loading on line and equipment thus providing much improved sizing and overload load monitor compared with 3 phase load measurements;

- voltage level monitoring rather than dependency on voltage alarms or customer compliant to identify voltage issues. Of growing importance with the network voltage impacts of massed PV generation;
- significant improvement in energy theft detection leading to significant recovery of lost revenue;
- enabling safety monitoring to detect neutral integrity issues and reduce sock risk;

- planning to utilise the utility HAN capability to provide secure communications to DRED devices controlling air conditioner settings as an alternative to augmentation;
- are looking to utilise meter status and other smart meter outcomes to better inform control centre re outages and outage handling.

Across all the Victorian DNSPs, the initiatives developed by AusNet Services using power quality data are driving important developments to upgrade the AMI and other DNSP systems to allow the collection of more detailed "5 Minute" power quality data that enable many network/societal benefits.

Many benefits from this detailed data cannot be realised without density of AMI meter installations. It requires a major system upgrade that requires a reasonable sized project to implement based on a network benefits business case. The 5 minute power quality data is key to a number of network benefits such as detection and location of high resistance joints, meter bypass, neutral integrity, phase identification and phase balancing. This type of benefit realisation has taken some time to implement and the full benefits across all DNSPs will start to flow once the technology outputs are put into business as usual practice. The benefits will include improved supply reliability as well as improved safety.

# Appendix E – Customer protections

The NERR introduces a new rule 91A which is intended that the DNSPs will notify customers of planned interruptions for metering installations and meter maintenance work.

Installing a new meter often necessitates an interruption to the consumer's electricity supply. DNSPs currently are required to notify small customers when supply is interrupted. An interruption to carry out a deployment of advanced meter would constitute a 'planned interruption', in which case the DNSP will be required to notify the customer at least four business days before the date of the interruption in a form specified in the NERR, and use its best endeavours to restore supply as soon as possible.422 This arrangement has not been amended through the draft rule. The draft rule inserts a new rule 91A in the NERR, which requires the Metering Coordinator and DNSP to assist each other and cooperate where the installation, maintenance, repair or replacement of metering equipment requires an interruption to supply at the customer's premises'[56]

The Victorian DNSPs have already installed over 2.8 million meters and are concerned regarding the cost and efficiency of a DNSP project managed roll out across a multi retailer mandated roll out.

The Victorian DNSPs strongly recommend further consideration of the roll out arrangements, including, safety, liability and compliance *before* the Rules are finalised to ensure that there are cost effective workable arrangements with similar levels of customer protections.

***Planned maintenance – reduced customer protections***

The Victorian DNSPs are seeking to avoid unnecessary services and charges which are caused by the new framework. Therefore, we recommend that the AEMC:

- Affords small and large customers the same level of customer protections and notifications in writing for planned or routine maintenance of metering equipment consistent with previous policy decisions. Where the policy deliberations have changed, then the equivalent distributor obligations should also be removed.
- Affords life support customers the same level of timely notification of an interruption for the planned or routine maintenance of metering equipment regardless whether the distributor or the retailer is managing the metering installation.
- Ensures the regulatory framework applies the same compliance and reporting obligations, regardless of who is organising the metering
- Includes an obligation to notify DNSPs when planned maintenance is occurring at a premise. This may help DNSPs to better provide customers with supply information if the interruption can more quickly be attributed to the electricity network or the retailer's actions.

[56] AEMC Draft Determination p200.

The AEMC has identified five scenarios to describe the circumstances where a small customer may have a new meter installed by a Retailer's MC:

1. The customer chooses a product or service (e.g. load control) that requires a more advanced meter to be installed.
2. Retailer manages a 'deployment' of advanced meters to achieve business efficiencies.
3. Retailer initiates a 'routine replacement' of existing meters where sample testing indicates that they should be replaced.
4. An existing meter needs to be replaced because it is found to be faulty or otherwise non-compliant with the NER.
5. A new house or development is built and a meter needs to be installed to enable connection to the network.

The proposed amendments to the NERR oblige a Retailer to advise a small customer in writing of a retailer deployment or new meter deployment. However, the NERR appears to not place an obligation on the Retailer to advise a customer in the case of planned or routine maintenance of metering equipment that there will be an interruption, i.e. in the case of meters where the meter family has been found to be non-compliant. This is supported by the drafting amendment to NERR Schedule 1, 11 (b) which indicates that a planned replacement for a meter family requires no customer notification of the supply interruption.

Where a meter is faulty and impacting supply to the premises or where a customer requests a meter to enable connection or receive a new product then customer notification is not required as the customer already knows.

Current provisions in the NERR include planned or routine maintenance within the definition of planned interruption, NERR 88. NERR 90 requires for all customers for DNSPs to notify customers of planned interruptions in writing, including the expected date and time and to require DNSPs to use best endeavours to restore customer supply. NERR 125 (2) (d) furthers this obligation in respect of life support customers. In addition, under NERR 99 the DNSP has a clear obligation to advise the Retailer of planned interruptions.

The AEMC's proposed drafting offers reduced customer protections in the following areas:

- Large customers may receive no notification of a Retailer new meter deployment and may not receive notification of a planned interruption e.g. customers in the 40-160 or 100-160
- Neither large nor small customers are required to be notified of a planned interruption and meter replacement (unless 91A remains with the obligation on the DNSPs )
- Life support customers are not required to be provided with 4 clear business days of any planned interruption.

NERR 99 requires the DNSP to notify the Retailer at the same time that the customer is notified of the planned interruption. An equivalent rule should be provided for the Retailer to notify the DNSP that the customer's premises will be taken off supply. This will assist the DNSP in managing any customer's queries or move in queries about supply related issues and may avoid unnecessary truck visits charged to the current FRMP.

It would be useful if these requirements were made clear by the AEMC as they may require new B2B arrangements which will need to be clarified before the commencement of the B2B development work. Where policy direction is unclear, industry participants will take longer to form and agree the requirements and the proposed timeframes are already tight.

***Provision of Information to Customers – Remote energisation timeframes but not cost?***

The AEMC should further consider customer protections in relation to transparency of service provision and price to consumers and in relation to discriminatory services and price in relation to remote energisation services.

The AEMC proposes that NERR 56 (1) is amended to include the provision by the Retailer to the customer of applicable de-energisation and re-energisation timeframes. We would expect that the NERR or a jurisdictional regulatory instrument establish an upper time limit for these remote services which would apply during business hours. A regulated upper time limit for remote energisation services could also be used within the regulatory compliance and enforcement framework. The time frames for remote re-energisation and de-energisation may be useful for customers, so might a clear view of the service charge.

Customers are protected today by regulated services relating to connection, ongoing supply and initial energisation, re-energisation and de-energisation as the DNSPs provide these services based on AER approved charges. Where customers are experiencing energy affordability issues or hardship, the cost of the de-energisation and re-energisation services will have a significant impact on customers.

Where a customer cannot afford to be remotely re-energised or a Retailer refused such a service, the customer could churn to another Retailer. However, to avoid meter churn the customer still relies on the same MC (and hence likely the same charge impost) to be re-energised, the alternative is for the next Retailer to churn the meter and pay the associated costs. This may lead to hardship customers being in a more vulnerable position than would otherwise be the case.

Whilst the AEMC considers that the metering charges will most likely not be charged as a line item on a bill and that they will be smeared across all customers, there appears to be little thought regarding the customer protections associated with various MC charging arrangements which may vary by Retailers and may ultimately be charged directly to customers. This means that customers with various Retailers have varying (and unknown) remote re-energisation charges. Further, it is unclear whether the charge is averaged across all MC contracts to the customer. In other words, a hardship customer with one Retailer may have certain remote de-energisation and re-energisation charges, yet another MC or retailer may charge quite differently forcing the customer to find another Retailer.

Generally these supply related services are managed in a non-discriminatory manner so that customers of one Retailer are not treated differently from customers of another Retailer. The DNSP in the past would not have been able to favour their host Retailer in terms of service or price; the equivalent protections should be afforded to customers in relation to remote de-energisation and re-energisation services.

***Official Identification***

The AEMC should amend the NERR and the NERR Schedule 1 contract to provide that representatives seeking access to a premise need to comply with energy laws, carry or wear official identification and show the identification if requested.

Where a DNSP representative seeks access to a premise then the DNSP's representative needs to comply with energy laws, carry or wear official identification and show the identification if requested, see NERR Schedule 2, 9.2. This customer protection or DNSP obligation within the customer contract applies to all customers regardless of size. This is no different to the protections afforded to customers in Victoria under the Electricity Customer Metering Code (clause 2.1 (a)) which equally apply to Retailers and also responsible persons within exempt networks.

In view of that the Retailer, MC, or MP may attend the site possibly to repair or replace malfunctioning meters at any time of day, it would be reasonable to expect that the representative seeking access had equivalent obligations. NERR Schedule 2,9.2 (b) should be inserted into the customer – Retailer contract for all customer sizes and also inserted into an appropriate place in the NERR to provide identification for all access at all premises and compliance with energy laws.

# Appendix F - Consequential changes to Victorian instruments

The Victorian DNSPs note that limited existing obligations in relation to a meter exchange (that lie with both the retailer and the distributor) to install a complying AMI meter will remain until the Victorian Government chooses to revoke them. Retailers have an obligation that for any sub 160 metering exchange where they were the responsible person on 1 January 2009 and there is a need to replace the meter then a complying AMI meter is required in accordance with CROIC 14.3. Similarly for any distributor required meter exchange or new connection, the distributor must install a complying AMI meter in accordance with CROIC, 14 AA. These obligations on retailers and distributors, including the AMI meter functionality, system performance levels and service levels may continue beyond the roll out end date and beyond the end of the derogation and the commencement of the new rules. The richer functionality outlined in the Victorian instruments needs to be read in conjunction with and add to the minimum services specification outlined in the NER.

In Victoria there are a number of aspects of the regulatory framework beyond the few amendments proposed by the AEMC which need to be considered, some examples include:

The **Electricity Distribution Code,** amongst other matters, regulates connection services to customers relating to energisation, de-energisation, supply interruptions (planned and unplanned) and related notifications. For the new chapter 7 rules to work properly in Victoria, the obligations in sections 12 (Disconnection of supply) 13 (reconnection of supply) and other related obligations in the Electricity Distribution Code will need to be reviewed in detail. They include very important customer protection obligations. The draft rule determination makes no mention of making consequential amendments to this code. Below we provide examples of obligations which require consequential amendments.

### Consequential amendments to Victorian Distribution Code

| Distribution code that require amendment | Comment |
|---|---|
| Clause 2.5 | Under this clause, a distributor must use best endeavours to energise the customer's supply address within one business day of the request being made, if such request has been made to the distributor. This obligation requires amendment such that the obligation transfers MC to ensure customer protection is retained. |
| Clause 2.3.1(b) Distributor obligation to de-energise in an emergency | The clause requires amendment to relieve distributors of this obligation where the distributor is not the MC at the site. |
| Clause 5.4.1 Unplanned interruptions | This clause requires a distributor to advise of unplanned interruptions by way of a phone service or website. The obligation requires the distributor to keep the customer informed of the on the nature of the interruption and the estimate of time when supply will be restored.<br>Where the meter is faulty then the distributor will not be able to restore supply. The clause requires amendment to relieve DNSPs of this obligation where the distributor is not the MC at the site.<br>To ensure customer protection a similar obligation should be placed on MC with respect to keeping the customer informed of the on the nature of the interruption and the estimate of time when supply will be restored. |
| Clause 5.5 Planned interruptions | Where meter replacements and planned interruptions are not initiated by the customer but are caused by routine maintenance then, similar obligations may be warranted on the MC.<br>This clause requires amendment to relieve DNSPs of this obligation where the distributor is not the MC at the site.<br>There is also a need for similar obligation to notify the distributor where the distributor is not the MC at the site so that the distributor knows when the customer is off supply. |
| Section 12 - Disconnection of supply | There are numerous obligations in this section relating to disconnection of supply. There are several important customer protection obligations describing the circumstances when supply must not be disconnected.<br>This section should be amended such that the obligations equally apply to MCs. |
| Section 13 - Reconnection of supply | There are numerous obligations in this section relating to timely reconnection of supply. These are very important customer protection obligations, which should be amended to equally apply to MCs. |

**Electricity Customer Metering Code** includes additional customer protection obligations, which applies to retailers, distributors and metering providers.

The draft rule determination suggests that the Victorian Government and ESCV should consider whether to make amendments to the Electricity Retail Code for consistency with the proposed amendments to the NERR. The Victorian DNSPs consider there are several other obligations, which have not been considered in the propose NERR amendments, which require attention.

Our initial review indicates that the following provisions are affected by, or will affect the Victorian application of, the national competitive metering reforms. These obligations will need to be clearly amended to reflect the correct parties and contracting arrangements. The clauses which we believe requires amendments are set out in the table below.

| Electricity Customer Metering Code | Comments |
|---|---|
| 2.1 Official identification of a representative seeking access to a metering installation. | This obligation should apply to MCs. |
| 2.3 Customers obligations to the MC where the meter housing needs to be updated to comply with Australian standards and wiring rules. | This should go into the retailers supply contract with the customer. |
| 2.6 The obligation to provide customers with information relating to how to read the smart meter. | This obligation should apply to MCs. |
| 3.1 The need for the retailer and the distributor to agree to any change of metering configuration/equipment which may impact the customers network or retail tariff needs to be agreed. | The policy intent is that a customer should receive a like for like meter and that the network tariff or contracted services should not be impacted. This is not supported by the NER drafting.<br>The metering equipment has a range of settings which may be used to provide a network benefit to consumers. If an equivalent metering arrangement is not going to be established then the distributor should have legitimate rights to object in MSATS to the new metering provider/metering data provider. |
| 6.1 (aa) Once a premise has a smart meter, it can only be replaced with a smart meter – *smart meter* means an *interval meter* that meets the functionality requirements set out in the *Functionality Specification*. | Whilst most of the identified issues regarding the metering code can be easily amended, by replacing responsible person with metering coordinator, the replacement of smart meters (i.e. 'no reversion') in clause 6.1 is fundamental to realisation of the smart meter benefits. It recognises the Victorian Government's policy intention to enable DNSPs to realise the full benefits of smart meters.<br>Most of the of the residential and small business customers (98%) have smart meters and it is critical to realisation of wider network benefits to all customers – a key input to the Victorian Government's business case that supported the mandated smart meter rollout.<br>Given the flexibility for some customers in relation to metering arrangements in the draft rule, the Victorian DNSPs recommend that there be clear non reversion policy relating to Victorian AMI meters. |