Department of Primary Industries

Victorian Government

Rule Change Proposal (Jurisdictional Derogation)

Advanced Metering Infrastructure Rollout

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Victoria
The Place To Be

Contents

AMI Rule Change Proposal (Jurisdictional Derogation - Victoria)

1. Introduction

1.1 Request for Rule change

In accordance with section 91 of the *National Electricity Law* (the *NEL*), the Victorian Government requests the Australian Energy Market Commission (AEMC) to make changes to the National Electricity Rules (the *Rules*) by way of a jurisdictional derogation in connection with the rollout of advanced metering infrastructure (AMI) in Victoria.

As required by section 91(3) of the NEL, the Minister for Energy and Resources has consulted with the Ministers of the other participating jurisdictions before lodging this submission with the AEMC.

1.2 Background

The Victorian Government has decided that AMI, consisting of an interval meter platform with two-way communications, and core functionality of remote meter reading and remote connection and disconnection, plus further advanced functionality covering quality of supply monitoring, outage detection, tamper detection, controlled load management and supply capacity control, will be installed for all small Victorian electricity customers (consuming less than 160 MWh per year) commencing in late 2008 by an efficient accelerated rollout.

The Victorian Government decided that this policy approach was necessary to ensure that that the benefits of AMI to customers and the market could be achieved in an efficient and timely manner.

Following a cost-benefit study in 2005 (the *Study Report*)[1] amendments to the *Electricity Industry Act 2000* (Vic) (the *EIA*) were made in August 2006 that enabled Orders in Council to be made to establish obligations on licensees to deploy AMI and to set out details of the AMI deployment.

Further details in relation to the policy background of the AMI rollout are set out in Schedule 1 to this submission.

1.3 Distributor exclusivity

In this submission, the Victorian Government is seeking exclusivity, by way of a jurisdictional derogation for a transitional period, for *Local Network Service Providers* to act as the *responsible person* in respect of the AMI meters rolled out to small customers consistent with the framework established under the EIA. The detail of the derogation sought is set out in section 2.

The derogation is sought as under Chapter 7 of the Rules, which regulates metering for *Second Tier Customers,* the *Market Participant*[2] is the *responsible person* for remotely read

[1] *Advanced Interval Meter Communication Study*, CRA International and Impaq Consulting, Prepared for Department of Infrastructure, December 2005. Available from the Victorian Government website via the following link; http://www.dpi.vic.gov.au/dpi/dpinenergy.nsf/childdocs/-384C1AC0F3D5716CCA25729D00102547-A8BAF6E4E66C900FCA2572B20004C403?open

[2] For these purposes, the *Market Participant* is the retailer for the relevant *connection point.*

interval meters unless the retailer requests the *Local Network Service Provider* to assume that role in respect of the relevant *metering installation*.

Additionally, it is proposed that the *Local Network Service Provider* would be able to nominate the agent to be used by *NEMMCO* to collect data from the *relevant metering installations* during the period of the derogation. Under existing market arrangements between *Market Participants* and *NEMMCO*, the *Market Participant* makes this nomination.

The Victorian Government believes that the alternative of the retailers acting as the responsible persons will result in an inefficient rollout with potential for costly multiple duplications of infrastructure, possible stranding of infrastructure when customers transfer between retailers, uncertainty as to how or if the network benefits of AMI can be achieved and act as an impediment to customer transfer between retailers adversely affecting the overall retail electricity market. Sections 3 and 4 set out the reasons for the need for the derogation in more detail.

1.4 National Electricity Market Objective

The derogation will contribute to the National Electricity Market objective by promoting:

- the efficient use of electrical services by ensuring that network operational services are provided through an integrated system that is the responsibility of the distributor;
- efficient investment by providing for an efficient initial rollout of AMI that will minimise the potential for meter churn; and
- the long term interests of customers by enhancing the competitiveness of the retail electricity market and minimising costs to customers.

Section 4 sets out in more detail how the derogation will promote the National Electricity Market Objective.

1.5 Content of submission

The remainder of this submission (in accordance with section 92 of the NEL) contains:

- a description of the proposed Rule (to take the form of a jurisdictional derogation to Chapter 7 of the Rules);
- a statement of the issues concerning the existing Rules that are to be addressed by the proposed derogation and an explanation of how the derogation addresses these issues;
- an explanation of how the derogation would or would be likely to contribute to the achievement of the national electricity market objective; and
- a discussion of the matters to which the AEMC is required to have regard in making a jurisdictional derogation and the date on which the derogation, if made, will expire.

As noted above, Schedule 1 of this submission includes a discussion of the policy background behind the AMI rollout, lessons from overseas experience with implementing AMI, together with some notes on the economics that allow density benefits to be captured. Schedule 2 of the submission sets out the proposed drafting for the derogation requested in this submission, against the current Rules, and includes a further sample drafting for the proposed derogation in the event that *NEMMCO's* proposed rule change ("Integration of NEM Metrology Requirements") for first tier metering installation requirements is adopted.

Italicised terms appearing in this submission have the meaning given in the Rules, unless the context requires otherwise.

2. Description of Proposed Rule

2.1 Designation as responsible person

The object of the proposed derogation to the Rule is to make, for a period associated with the rollout, the *Local Network Service Provider* the *responsible person* for each *metering installation (other than type 1 or type 2 metering installations)* for a customers' *connection point* located in Victoria that consumes less than 160MWh per annum of *energy* and which:

(a) is installed on or after the AMI installation "start date" of 31 December 2008 (see below), unless the retailer is the *responsible person* for such *metering installation* at the start date and the installation occurs in accordance with the ordinary replacement cycle of that retailer; or

(b) was installed prior to the start date, unless the retailer is the *responsible person* at the start date.[3]

It is proposed that the commencement of the exclusivity period will coincide with the start date for the mandated rollout and the introduction of regulated pricing for costs associated with the provision of relevant metering installations as outlined below (see section 3.5). The start date for these purposes will be specified in an Order in Council to be made under the EIA in connection with the AMI rollout.

The Local Network Service Provider will be given the exclusive right to act as responsible person for relevant metering installations from the start date until 31 December 2013, being the date which is one year after the intended conclusion of the AMI rollout.

To this aim, it is proposed that the effect of the derogation will be that, notwithstanding clauses 7.2.2 and 7.2.3(a) of the Rules:

- the retailer may not elect to be the responsible person for a relevant metering installation under clause 7.2.2(a);
- the retailer will not be the responsible person for a relevant metering installation under clause 7.2.2(b); and
- the Local Network Service Provider will be the responsible person as if the relevant metering installations were referred to in clause 7.2.3(a)(2).

2.2 Terms and conditions

It is proposed that the derogation will also provide that clauses 7.2.3(d)-(h) of the Rules will apply to each *relevant metering installation* as if that *relevant metering installation* was referred to in clause 7.2.3(d). This has the effect that, as is currently the case in respect of types 5-7 *metering installations*, the retailer must request an offer from the *Local Network Service Provider* to act as the *responsible person* in respect of a *relevant metering installation*. The *Local Network Service Provider's* offer must be fair and reasonable and must not unreasonably discriminate between retailers or between the customers of any

[3] These *metering installations* being Type 4 *metering installations* under S7.2.3 of the Rules.

retailer (clause 7.2.3(f)). If the retailer does not accept the offer, it may dispute the offer in accordance with Rule 8.2.

2.3 Cost recovery

Clause 7.3.6(a) of the Rules provides that the *financially responsible Market Participant* is responsible for the payment of all costs associated with the provision, installation, maintenance, routine testing and inspection of the *metering installation*. Clause 7.3.6(f) provides that paragraph (a) does not apply to the recovery of costs by a *Local Network Service Provider* that are associated with the provision, installation, maintenance, routine testing and inspection of types 5-7 *metering installations*, to the extent that these costs can be recovered by the *Local Network Service Provider* in accordance with a determination made by the *AER* or a relevant *Jurisdictional Regulator*.

An Order in Council to be made under the EIA in connection with the AMI rollout will empower the Essential Services Commission (ESC) and its successors to determine the revenues which *Local Network Service Providers* may earn in respect of these costs for *relevant metering installations*[4]. Accordingly, it is proposed that the derogation provide that the *Local Network Service Provider* will be entitled to recover the costs associated with the provision, installation, maintenance, routine testing and inspection of *relevant metering installations* in accordance with clause 7.3.6(f) of the Rules.

2.4 Metering Data Agent

It is proposed that the derogation will also provide that despite anything to the contrary in any contractual or other arrangements between a retailer and *NEMMCO*, only the *responsible person* for any *relevant metering installation* (i.e. the *Local Network Service Provider*) may select the person to be engaged by *NEMMCO* to provide *agency data collection systems* and *agency metering databases* under clauses 7.3.5(c) and 7.9.1(b) - (b1), provided that such person complies with the service level requirements and other criteria established by *NEMMCO*.

2.5 National and jurisdictional application

The Victorian Government is seeking to ensure consistent treatment between First-Tier Customers and Second-Tier Customers.

Metering for First-Tier Customers in Victoria is currently regulated by the ESC under the Electricity Customer Metering Code. Under that Code, a retailer may elect to be responsible for metering installations and data services for customers with remotely read interval meters.

It is also noted that NEMMCO has made a recent submission to the AEMC seeking amendments to the Rules for the purpose of metrology harmonisation. NEMMCO's proposal is intended to result in metering for First-Tier Customers being regulated under

[4] The process for determining the revenues which may be earned by the *Local Network Service Provider* undertaken by the ESC or its successor will include an opportunity for consultation with *financially responsible Market Participants* to facilitate the recovery of efficient costs.

the Rules.[5] The Victorian Government is supportive of the harmonisation of the metrology instruments and notes that NEMMCO's harmonisation proposal is consistent with the derogation being sought that is intended to apply only to customers that consume less than 160 MWh per year.

Subject to the timing and final form of the Rules that result from the NEMMCO proposal, for the purpose of the rollout it may be necessary to amend the Electricity Customer Metering Code to provide distributors with exclusivity for first tier customers consuming less than 160 MWh per annum for the rollout period.

3. Statement of Issues

The AMI rollout metering installations are considered to be type 4 *metering installations* under the Rules and therefore are covered by clause 7.2.2 that provides that a *Market Participant* may elect to be the *responsible person* for types 1-4 *metering installations*. Accordingly, under the current Rules, the retailer may elect to be the *responsible person* for *relevant metering installations*.

As described in section 2.1 of this submission, it is proposed that these provisions would be subject to a derogation making the *Local Network Service Provider* the exclusive *responsible person* for *relevant metering installations* for a transitional period for the purpose of facilitating an efficient, accelerated AMI rollout.[6]

Other market mechanisms and commercial arrangements which are provided for under the existing Rules have the potential to provide scale and density benefits however these arrangements are currently immature, could not result in a roll out of AMI in the timeframe contemplated and may give rise to monopoly concerns.

Independent of which party is the *responsible person*, metering arrangements are subject to considerable regulation in relation to meter standards and performance and metering data collection, validation and delivery. This regulation is designed to ensure that all relevant participants that have a need for customers' data receive accurate data in an agreed format that is received in a timely manner. Prior to the conclusion of any national approach to AMI, the regulatory arrangements include the retention by state governments of the power to determine the minimum metering requirements for small customers.[7]

Additionally, the metering arrangements provide for specialist metering services to be performed by appropriately accredited organisations on a competitive basis. The derogation only seeks to specify that the responsible person for relevant *metering installations* (i.e. the Local Network Service Provider) will be the party responsible for the appointment of the service providers.

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[5] This submission is available from the AEMC website as follows;
http://www.aemc.gov.au/electricity.php?r=20070524.142009

The Victorian Government notes that NEMMCO is proposing a number of other changes which support the primary proposal for the harmonisation of first tier metering, these changes will also be relevant to a rollout of AMI to small customers.

[6] An accelerated rollout means a rollout that would cover all customers in the shortest possible time (around 4 years) to enable the benefits of AMI to be achieved as early as possible and to ensure an efficient deployment.

[7] *Australian Energy Market Agreement – Amended,* June 2006, Published by Ministerial Council on Energy, Annexure 2, p. 2.

The following sections set out the issues arising from the current position under the Rules, and the way in which these issues would be addressed by the proposed derogation.

3.1 The effect of the existing Rule

The Government believes that the implementation of its policy cannot be reasonably achieved under the existing arrangements where the retailer has primacy in the decision as to which party will be the *responsible person*. This is because:

(a) Uncertainty

- If the retailer was entitled to choose whether to be the responsible person for a relevant metering installation, the economies of scale and density referred to in section 3.2 (b) below will be compromised.
- There would be considerable uncertainty as to how retailers would provide the operational network benefits that are provided by AMI.
- While retailers would be required to engage metering providers for the provision of AMI, it is not clear on what basis the metering providers would have access to the network assets for the provision of communications (or whether this would be an attractive approach to metering providers at all) even where this was an efficient mechanism to provide AMI.[8]

(b) Barriers to entry

- A mandated retailer rollout of AMI would create barriers to entry for new retailers and may also prejudice existing small retailers.
- Retailers would need to provide the network functions and thereby enable the resulting benefits that are envisaged to be provided through AMI during the course of the rollout.

(c) Inefficient duplication of assets

- Multiple sets of (geographically overlapping) meter communication infrastructure would likely exist if retailers were mandated to rollout AMI or were entitled to choose whether to be the responsible person for a relevant metering installation. (See further comments in relation to the transitional nature of the derogation below.)
- The loss of customers' AMI systems to another provider under retailer responsibility may have the additional impact on top of the replacement cost of the metering installations of requiring the distributor's AMI network to be reconfigured at a cost to all customers.

(d) Cost to the energy market

- The Government's objectives in relation to an orderly cost recovery approach would be significantly more complex to achieve where there is retailer involvement in the rollout.

[8] A *responsible person*, the retailer in this case, must engage a *metering provider* for the provision, installation and maintenance of a *metering installation* under clause 7.2.5 (a) of the Rules.

- It is expected there would be an accelerated and/or uncertain timeframe for the recovery of costs by retailers given their shorter term relationship with customers resulting in relatively higher cost to customers or a request for (contractual) penalties if customers' switch prematurely.

(e) Effect on customer transfer

- Under a retailer driven AMI rollout, when a customer transfers from one retailer to another, the responsible person must also change to the new retailer[9]. This may have the following impacts:
  - the metering installation inefficiently being removed and another installed (meter churn) when a new *metering provider* is engaged;
  - meter churn will increase the cost of transfer and so impact on the effectiveness of the (primary) retail electricity market and, indirectly, the wholesale market;
  - the associated interruption to supply for meter changes would be an additional barrier and impediment to customer switching ;
  - retailers will be incentivised to "lock-in" customers to provide for meter cost recovery through longer term contracts reducing the potential for retail market activity; and
  - to attempt to manage the above churn issues, it is likely that new regulatory arrangements will be necessary that require the existing metering provider to provide metering provision services to the new responsible person under reasonable terms and conditions.[10]

3.2 How the proposed Rule will address the issues

The Rule will ensure the success, timeliness and efficiency of the Government's AMI rollout policy decision by providing the distributor with exclusivity provided under the proposed derogation.

(a) Certainty

- The uncertainties referred to above would be reduced or eliminated, that is:
  - the distributor who has the network responsibility for the particular area and who has traditionally had the responsibility for small customer metering would be responsible for the AMI rollout. This would be a continuation of the existing policy in respect of small customer metering;
  - there would be minimal uncertainty as to whether the network operational benefits of AMI could be realised; and
  - there would be minimal uncertainty regarding the ability to use the network for communications purposes where it was efficient to do so.

[9] Unless the retailers accept an offer from the relevant distributor to be the *responsible person*

[10] The AMI metering provider in this case under a retailer roll out may be able to exercise some market power given the alternative of replacing the metering installation and relevant metering communications, hence some form of regulation or price monitoring may be required.

(b) Economies of scale and density

- The economies of density which flow from distributor exclusivity enables a lower cost and more efficient AMI rollout than a rollout which does not provide for distributor exclusivity.
- A higher volume of meters rolled out by each distributor means higher economies of scale and lower unit costs. (It is acknowledged that the larger retailers operating in Victoria have, nationally, access to equivalent, if not larger, potential economies of scale. However, these economies are highly dependent upon the timing and the extent to which the retailer chooses to rollout AMI to a sufficiently large proportion of their customer base. The Victorian Government considers that the practicable economies of scale for the defined Victorian AMI deployment still favour the distributor, at this time.)
- A rollout in concentrated distributor geographical areas means less 'drive time', and downtime for the system therefore contributing to density economies.
- Remote communication technologies can be lower cost when acquired from vendors participating in a large-scale rollout.
- The avoided cost of manual meter reads was an important factor behind the Government's policy decision. The value of this becomes less significant where remotely read meters are randomly distributed.

(c) Cost recovery

- Requiring distributors to recover their costs in accordance with a determination of the ESC (to be made pursuant to the Order in Council) facilitates the smearing of cost recovery across relevant customers.
- Smeared cost recovery provides an equitable approach to cost recovery so that all small customers pay the same metering charges during the rollout period, regardless of when they actually receive an AMI meter.
- Note also separate section on this issue below.

(d) No duplication of assets

- There is no costly multiple duplication of assets in a single area if the distributors have exclusivity, compared to the case if many or all retailers were responsible for AMI.

3.3 Impact on competition

It is submitted that the proposed derogation providing for distributor exclusivity will;

(a) Enhance competition in the main retail electricity market as:

- there would no barrier to customer switching between retailers associated with responsibility and hence possible churn of the metering assets;
- small and new entrant retailers will not be disadvantaged by their low customer density or the need to negotiate metering services from other retailers;

- there will be no incentive for retailers to lock-in customers for long periods to recover meter costs; and
- there is an increased potential for more targeted product and price offerings to customers by retailers where energy is settled based on actual consumption rather than a load profile.

(b) Continue to provide for competition in the provision of metering services:

- competition will still exist at the meter vendor and contractor level as distributors will use a range of suppliers for efficiency reasons and in order to spread commercial risk. This is demonstrated by the current trials of AMI communications technology in Victoria where eleven suppliers of technology are participating. Additionally, well established point-to-point technologies are likely to have application in the rollout; and
- competition for the provision of other value-added metering services such as in-home-displays, which are facilitated by AMI, will remain.

Note that it is the view of the Victorian Government that the potential benefits available to consumers through enhanced competition in the retail electricity market are significantly greater than the benefits available to consumers through the choice of responsible person (noting also that the provision of metering services to the responsible person) is already competitive.

3.4 Transitional measure only

The arrangements contemplated by the proposed derogation are only for a period associated with the initial rollout (the period of the rollout plus one year). In the short term, the proposed arrangements are the most cost effective way in which to implement the rollout, and can be replaced once the initial rollout ends. The derogation allows a critical mass of AMI to be established and for AMI to become the established norm for small customer metering.

Following the expiry of the derogation, the cost effectiveness of different approaches to AMI can be tested by other parties, e.g., for new housing developments. It may be that on a case by case basis new technologies will be available where ad hoc approaches will become cost effective over time. Further, it may be possible to develop more practicable systems that will enable the envisaged network operational benefits to be captured even where the retailer is the responsible person. At present, however, the practicality of these approaches is uncertain, such that the Government's policy position is at high risk of not being able to be effectively implemented.

3.5 Terms and conditions

Clauses 7.3.6(b) and (c) of the Rules provide that, for types 1 to 4 *metering installations*:

- a *Market Participant* may request in writing an offer from the *Local Network Service Provider* to act as the *responsible person*; and
- if the *Local Network Service Provider* receives such a request, it must offer to act as the *responsible person*, and provide the terms and conditions of the offer to the *Market Participant* no later than 15 *business days* after receiving the request.

The terms and conditions on which such an offer is made are not further regulated, given that the retailer may elect to reject the offer if it is not satisfied with the terms, and instead act as *responsible person* itself.

Where the distributor is the exclusive *responsible person* for a *metering installation* and, accordingly, the retailer must acquire the relevant services from the distributor, it follows that the terms and conditions on which those services are to be provided should be subject to some degree of regulation.

As proposed in section 2.2 above, it is submitted that the approach which has been adopted in relation to types 5, 6 and 7 m*etering installations*, as set out in clauses 7.2.3(d) to (h), is also appropriate in relation to *relevant metering installations*.

In this regard it is also noted that it is proposed to further regulate the provision of the relevant services through an Order in Council to be made under the EIA, which will prescribe minimum functionality and service levels in relation to the AMI meters. Appropriate minimum service levels are currently being defined through an extensive consultative process between distributors, retailers and other stakeholders as a key workstream undertaken by the Victorian AMI Project.

Retailers will be able to negotiate the provision of service levels in excess of the prescribed minimum, as well as new services, with distributors.

3.6 Cost recovery

As described above:

- clause 7.3.6(a) of the Rules provides that the *financially responsible Market Participant* is responsible for the payment of all costs associated with the provision, installation, maintenance, routine testing and inspection of *metering installations*; and
- clause 7.3.6(f) provides that clause 7.3.6(a) does not apply to the recovery of costs by a *Local Network Service Provider* that are associated with the provision, installation, maintenance, routine testing and inspection of types 5-7 *metering installations*, to the extent that these costs can be recovered by the *Local Network Service Provider* in accordance with a determination by the *AER* or a *relevant Jurisdictional Regulator*.

As noted above, *relevant metering installations* would be regarded as type 4 *metering installations* under the current Rules. As a result, the *financially responsible Market Participant* would be responsible for all installation and other costs referred to above, once the AMI meter was installed.

The recovery of costs associated with type 5 *metering installations* in connection with the ESC's interval meter rollout (IMRO) (see schedule 1 for further information) was addressed in the Electricity Distribution Price Determination 2006 – 2010 issued by the ESC in October 2005 (as amended in accordance with a decision of the Appeal Panel dated 17 February 2006). Accordingly, the costs recovered by distributors in respect of the provision, installation, maintenance, routine testing and inspection of type 5 *metering installations* are regulated.

In order to achieve a similar effect in the AMI rollout, it is proposed that the derogation provide that clause 7.3.6(f) of the Rules will apply to the recovery of costs by a *Local Network Service Provider* associated with the provision, installation, maintenance, routine testing and inspection of *relevant metering installations*. The distributors will be able to recover these costs in accordance with a determination of the ESC under an Order in Council to be made in connection with the AMI rollout. This means that the costs of providing and installing *relevant metering installations* will be regulated and may be smeared across relevant customers, instead of being charged to the *financially responsible Market Participant* in respect of a particular *relevant metering installation* under clause 7.3.6(a).

Again, there are opportunities for market participants to activity participate in the process to finalise the setting of regulated charges.

3.7 Metering Providers and Metering Data Agents

(a) Metering Providers

Clause 7.2.5(a) of the Rules provides that a *responsible person* must engage a *Metering Provider* for the provision, installation and maintenance of a *metering installation*, unless the *responsible person* is a *metering provider*. A *Metering Provider* is a person who meets the requirements set out in Schedule 7.4 of the Rules, and has been accredited and registered by NEMMCO (clause 7.4.2(a)).

Under the AMI rollout, it is proposed that the *Local Network Service Providers*, in their capacity as *responsible person* for *relevant metering installations*, will be entitled to choose the *Metering Provider* for such *relevant metering installations*.

In respect of the responsibility of the *Metering Provider* under the Rules to provide the *metering installation,* the *metering installation* includes the communication infrastructure that is to be established for data transport between the meter and the metering installation database.

(b) Metering Data Agents

Clause 7.3.5(c) of the Rules provides that *NEMMCO* may use *agency data collection systems* to collect *metering data*, process *metering data* into *settlements ready data* and transfer *metering data* to the *metering database*.

Clause 7.9.1(b) provides that *NEMMCO* may use *agency metering databases* to form part of the *metering database*. Clause 7.9.1(b1) provides that a person engaged by *NEMMCO* to provide *agency data collection systems* and *agency metering databases* (a *Metering Data Agent*) must comply with service level requirements and other criteria established by *NEMMCO*, including accreditation requirements.

Although not expressed as part of the Rules, *NEMMCO's* practice is to enable the retailers to select the *Metering Data Agent* from a list of possible suppliers provided by *NEMMCO*. This practice is supported by contractual arrangements between *NEMMCO*, the retailer and the *Metering Data Agent*.

For existing type 1- 4 *metering installations* the communications between the meter and the metering data management systems has often relied on established

technologies such as dial-up or GSM telephony being provided by the *Metering Provider*. To access the meter the *Metering Data Agent* just needs the phone number and password supplied by the *responsible person.* Hence access to the *metering installation* by alternative *Metering Data Agents* via the public telecommunications system is straightforward. In the case of AMI however the infrastructure established by the *metering provider* is considerable and will be integral with the distributor's related network management system and other systems associated with the AMI functionalities. The Victorian Government is of the view that the efficiency of the AMI rollout will be compromised unless distributors have the right to act as *Metering Data Agent* or to select the *Metering Data Agent*s for the following reasons;

- Given the nature of the infrastructure outlined above it is logical that the provider and maintainer of the infrastructure that is integral with its network for the mass market also has the responsibility to act as *Metering Data Agent* or to select the *Metering Data Agent*s at least initially.
- The telecommunications infrastructure is to be used for the data collection processes as well as the additional distributor-related functionality, such as remote disconnection and reconnection and supply quality monitoring.
- While these other functions could be accommodated under the current Rules, there may be some confusion as to roles and responsibilities. Providing distributor exclusivity for a transitional period will enable development of the processes during this period, with this experience to inform further consideration of how these arrangements will operate in an environment of retailer responsibility.

Providing that *Local Network Service Providers* will be the exclusive *responsible person* for *relevant metering installations* as discussed in section 3.1 above does not of itself give *Local Network Service Providers* the right to act as *Metering Data Agent* for the *relevant metering installation* or to select the *Metering Data Agent*.

Rather the proposed derogation will provide that despite anything to the contrary in any contractual or other arrangements between a retailer and NEMMCO, only the *responsible person* for any *relevant metering installation* (i.e. the *Local Network Service Provider*) may select the person to be engaged by *NEMMCO* to provide *agency data collection systems* and *agency metering databases* under clauses 7.3.5(c) and 7.9.1(b)-(b2), provided that such person complies with the service level requirements and other criteria established by *NEMMCO*.

3.8 Retailer incentives

The Victorian Government believes that retailers will only have an effective incentive to rollout AMI if:

- the functionality of the AMI meters to be rolled out by distributors does not meet their needs;
- the associated technology performance standards and distributor standards of service do not meet their needs; and/or

- the costs associated with a regulated distributor-lead rollout are too high.[11]

Some retailers have previously expressed a preference for the "threat of competition" (i.e. the choice of responsible person) as a mechanism to incentivise distributors to develop market focused AMI functionality and service levels, and to minimise costs, without any stated intention to elect to undertake the role of responsible person.

In considering these arguments, the Victorian Government notes that providing for flexibility with regard to the role of responsible person, for the purpose of the initial rollout, will incur significant market complexities (refer to Schedule 3 for a description of the likely arrangements required where retailers have an ongoing role during AMI rollout with regard to the nomination of the responsible person).

Furthermore, the extensive consultation and collaboration framework established by the Victorian Government since March 2006 to provide advice on functionalities, service levels and technologies, has provided ongoing opportunities for retailers to specify their requirements to ensure that any mandated and exclusive arrangements for distributors do not diminish a retailer's abilities to realise benefits (both operational and through product and service innovation). The Victorian Government is unaware of any functional requirement requested by any retailer that has not been incorporated in the current draft Minimum State-wide Functionality Specification. In addition, the Victorian Government is aware that some retailers have discussed with some distributors the possibility of providing functions and service levels in excess of the proposed minimum under separate commercial arrangements with a view to establishing competitive advantage through product differentiation.

In addition, to minimise the risk of unrealised opportunities for innovation, the Victorian Government has undertaken extensive research and analysis of functionalities adopted world-wide.

The Victorian Government, by way of an Order in Council under section 46D of the *EIA,* will prescribe minimum AMI service levels and also strengthen existing regulatory arrangements that encourage distributors to negotiate in good faith with retailers to agree higher levels of service, to ensure that prescribed service levels do not unduly constrain product innovation by retailers.

4. National Electricity Market objective

4.1 NEM Objective

The national electricity market objective is stated in section 7 of the NEL:

> *The national electricity market objective is to promote efficient investment in and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity and the reliability, safety and security of the national electricity system.*

[11] An effective incentive for retailers to rollout AMI would also be subject to the resolution of the issue of meter cost recovery and arrangements under customer churn.

The ways in which the proposed derogation would or would be likely to contribute to this objective are set out below. These generally relate to the issues with the existing Rules discussed above.

4.2 Effect of proposed derogation

The Victorian Government anticipates the derogation would contribute to the NEM objective as follows;

(a) Promotion of efficient use of electricity services

Networks will be able to provide enhanced services (for example, special reads and customer energisation and de-energisation) at reduced cost to all retailers and their customers.

The derogation ensures that the benefits of AMI in the provision of metrology services and network operational services are provided through an integrated system in each network rather than on an ad hoc basis.

Networks will have ready and efficient access to enhanced information about supply quality and outages and hence will be able to more efficiently resolve these issues, improving the overall performance of the networks.

(b) Promotion of efficient investment

Under the derogation, metering and associated communications and systems will not be duplicated hence the rollout of AMI, while providing the key information for retailer innovation, will be efficiently provided. Additionally, the potential for inefficient meter churn will be eliminated from the small customer market.

Networks will have enhanced usage information for all customers enabling better planning of new network investments and hence, in the long-run, a more reliable network.

The investment in AMI will be efficient as the regulator will provide for a regulated cost recovery based on its assessment of an efficient rollout.

The rollout itself will be efficiently conducted, it will minimise costs through the scale and density benefits available to the local network service provider that are not available from an ad-hoc approach.

(c) Long term interests of consumers

Customers will benefit from the enhanced competition in the retail electricity market associated with the timely and efficient rollout of AMI.

Customers in the long term benefit from an enhanced competitiveness of the retail electricity market as there will be no economic barrier to small retailers or new retailers in relation to the provision of metering for their customers.

Customers will also benefit from there being initially no confusion as to which party is responsible for their meter; this will be a continuation of current policy whereby distributors have responsibility for small customer metering.

Customers will also be protected by an appropriate regulated approach to cost recovery that is not directly available with a retailer led rollout.

Customers will face lower rollout costs from an efficiently staged rollout by the distributors and from the advantage distributors have with respect to scale and density in their regions.

Customers will benefit from the ability of second-tier retailers to geographically target advertising and AMI product offers during the course of a staged rollout by the distributors as functionality becomes available.

5. Jurisdictional derogation

5.1 Jurisdictional derogations

Section 89 of the NEL provides that, in making a jurisdictional derogation, the AEMC must have regard to whether:

(a) the derogation provides for the orderly transfer of the regulation of the electricity industry under jurisdictional legislation to regulation under the national electricity legislation;

(b) the derogation continues existing regulatory arrangements in a participating jurisdiction and the Minister of the relevant jurisdiction has notified the AEMC in writing that he or she considers it necessary and appropriate that the existing regulatory arrangements continue; or

(c) the derogation is necessary to exempt, on an ongoing basis, generating, transmission or distribution systems or facilities from complying with technical standards in the Rules because those systems or facilities, by reason of their design or construction, are unable to comply with those standards.

The proposed derogation is consistent with the concepts described in paragraphs (a) and (b) of section 89.

As discussed above, metering regulation is currently dealt with by a combination of national and jurisdictional regulatory instruments. In Victoria, while second-tier metering is addressed in the National Electricity Rules, metering for first-tier customers is regulated by the ESC under the Electricity Customer Metering Code. The NEMMCO Metrology Programme has a number of aims, including to harmonise national metrology arrangements and to bring metering for first-tier customers within the Rules. NEMMCO has recently submitted draft Rule changes to the AEMC as part of this process.

The MCE is also working on a project for the national roll out of smart meters which would be likely to be implemented through national regulation. At its meeting on 25 May 2007, the MCE noted progress and a forward plan for implementation of a staged approach for the national mandated rollout of electricity smart meters to areas where benefits outweigh costs, as indicated by the results of a cost-benefit analysis which would take account of different markets and circumstances in each state and territory and the circumstances of different groups of consumers. It is expected that the cost-benefit analysis of a national smart meter roll-out will be completed by the end of 2007.

The Victorian Government supports these initiatives for the harmonisation and enhanced national regulation of metering generally and of the broader initiative for examination of a national mandated rollout of electricity smart meters. Nevertheless, implementation of the

Victorian Government's policy with respect to the AMI rollout in Victoria needs to be progressed in the context of current legislative and regulatory arrangements as represented in the EIA and existing Victorian regulatory instruments. The anticipated transition over time of these arrangements to a national framework in an orderly manner will be facilitated by ensuring that the interfaces between the Victorian instruments and existing national regulatory instruments are clearly specified. This includes in particular identifying areas where there are conflicts between the Victorian instruments and the operation of the National Electricity Rules, and to establish transitional arrangements arising from the implementation of matters currently within the province of Victorian Government policy. The proposed derogation facilitates an orderly transfer by clearly articulating the current interfaces between Victorian and national instruments and establishing necessary derogations on a transitional basis.

The same line of analysis is relevant in considering the application of paragraph (b) of section 89. Paragraph (b) raises an initial question of interpretation concerning the meaning of the words "existing regulatory arrangements in a participating jurisdiction". It is submitted that the reference to "existing regulatory arrangements" needs to be read in the context of the continuing development of the national electricity market and progressive transfer over time of regulatory functions from jurisdictional to national regulatory bodies.

As outlined above, the regulation of metering arrangements is currently in a process of transition from jurisdictional to national regulation across a number of areas. In particular, section 14 of the AEMA contemplates the transfer of economic and non-economic distribution and retail regulatory functions from jurisdictional to national regulation over a timeframe which currently extends to July 2008. This includes certain aspects of metering regulation, although the AEMA contemplates that policies on the type of meters required for specific customer classes will remain a jurisdictional responsibility.

In that context, the concept of existing regulatory arrangements as used in section 89 must be taken to refer to arrangements which are properly in existence within a relevant jurisdiction at the time the proposed derogation is being considered. In Victoria, those current regulatory arrangements are represented by the provisions of the EIA which provide for the mandated roll out of AMI metering and the associated cost recovery arrangements to be administered by the ESC under the Order in Council. The distributor exclusivity in relation to relevant metering installations contemplated by the proposed derogation is an integral part of those existing regulatory arrangements and the Victorian Government accordingly considers it is necessary and appropriate that those arrangements continue.

As required by section 89(b) of the NEL, the Minister for Energy and Resources has notified the AEMC in writing that he considers it necessary and appropriate that the existing regulatory arrangements continue (as discussed above). A copy of this letter is attached in Annexure A.

5.2 Expiry date

The proposed derogation will expire on 31 December 2013, being the date which is one year after completion of the rollout. This date reflects the Government's assessment of the minimum period appropriate for cost recovery associated with the roll out, as reflected in the cost recovery Order-in-Council.

6. Policy Approaches to AMI implementation

This section will outline other substantive policy approaches that have been proposed for implementing AMI in Australia.

The Council of Australian Governments (COAG) has endorsed a staged approach for the national mandated roll out of electricity AMI (or smart meters) to areas where benefits outweigh costs, as indicated by the results of the cost-benefit analysis which will be completed by the end of 2007.[12] COAG has tasked the Ministerial Council on Energy (MCE) to progress its smart meter decision who, in outlining its principles for the responsibility for the smart meter rollout, reached a similar conclusion to that of the Victorian Government, and concluded:

> "Having regard to the benefits of scale and scope economies, as well as the efficiency and logistic complexity of a roll-out of smart meters, the responsibility for roll-out should fall on a single party in each geographical area. This single party should be each distribution network service provider within its own network area."[13]

The Productivity Commission supports a less interventionist approach to the implementation of AMI. The Commission, in recognising the value of the information available from AMI, states:

> "In the Commission's view, while there may be net benefits in a widespread roll out of 'smart' meters, prescribing the device or the provider has the potential to limit the adoption of alternative technologies and demand management strategies. The prescription should be limited to setting the minimum performance standards of the meter — such as standard operating protocols. The meters should also be upgradeable to allow for potential third party enhancements, which would improve contestability in the provision of electricity services."[14]

The Productivity Commission concluded its discussion of the options to improve the roll out smart meters by recommending:

> "Any mandated roll out of 'smart' metering devices should be subject to a comprehensive benefit–cost analysis. Mandated roll out of technologies should not preclude choice in the device or competition between service providers."[15]

It should be noted that the Victorian Government's approach to the AMI rollout meets the substantive requirements of the Productivity Commission:

- The Victorian Government decision for AMI has been based on a comprehensive cost benefit case (the study report);
- Only the minimum functional specification will be mandated, not technologies;

[12] COAG Meeting, 13 April 2007, Communiqué, p. 1.

[13] *Smart Meters – Information Paper on the development of an implementation plan for the roll-out of smart meters,* Ministerial Council on Energy, January 2007, p. 3.

[14] *The Private Cost Effectiveness of Improving Energy Efficiency*, Productivity Commission Inquiry Report No. 36, 31 August 2005, p. 346.

[15] Op Cit Productivity Commission, Recommendation 14.1 p 346

- The minimum functionality specification allows Retailers to add or upgrade the functionality to include in-home-displays (so that customers can monitor their usage and receive information from their retailer) and customer load management (e.g., air conditioning load) without the need to change the AMI that is in place; and
- Competition from service providers and meter vendors remains an important feature of the proposed approach.

The Productivity Commission in their inquiry into energy efficiency also examined market failures in energy markets, including the market for energy efficiency technologies, and discussed when market intervention is warranted. They conclude generally that:

> "The presence of market failure does not of itself warrant government intervention. Government intervention can be costly and introduces its own distortions, especially if the intervention is poorly targeted to achieving the relevant objective. Government intervention is only warranted when it produces net economic, social or environmental benefits to the community."[16]

The Victorian Government believes that its proposed derogation to the Rules meets the Productivity Commission's test for intervention and notes the Productivity Commission's review was directly concerned with energy efficiency cost-effectiveness for individual producers and consumers, not the wider community and the environment.

[16] Op Cit Productivity Commission, p. XXVI

Schedule 1

Background to the AMI Rollout

1. AMI Policy development in Victoria

In July 2004, the ESC mandated the rollout of manually-read interval meters, as a minimum, throughout Victoria, beginning in 2006. This interval meter rollout (IMRO) program was to result in around half of the metering stock in Victoria being changed-over to the IMRO-specification meters by 2013. This seven year timeframe covered customers with more complex metering. The program only specified change-over to interval meters on a new and replacement basis for small customers with relatively simpler metering, hence a timeframe for this latter group to change-over would be up to 40 years unless this decision were reviewed.

In view of developments in metering technology and the possibility that the IMRO decision could be expanded upon to deliver greater benefits to customers, the Victorian Government - Department of Infrastructure[17], together with the Victorian electricity distribution businesses and retailers, commissioned a cost-benefit study in 2005 to examine the net societal benefits for adding advanced functionality to the IMRO mandate (the Study Report). The Study Report established a societal business case for adding two-way communications and core advanced functionality – remote meter reading and remote connection and disconnection – to the IMRO mandate, and conducting the rollout according to an accelerated schedule of around four years for all Victorian customers consuming less than 160MWh of electricity per annum.

The Government announced its policy decision on an new advanced metering infrastructure mandate in early 2006. Amendments to the *Electricity Industry Act 2000 (Victoria)* (EIA) were made in August 2006 providing the Government with legislative heads of power to make Orders in Council requiring licensees to deploy AMI and establishing the detailed requirements for the AMI deployment.

[17] After the 2006 Victorian state election, the Victorian Government energy portfolio was transferred from the Department of Infrastructure to the Department of Primary Industries.

2. Lessons from overseas experience with AMI

Many overseas jurisdictions have also considered how new technology such as AMI would be implemented in their jurisdiction. The structural arrangements in other jurisdictions often differ from that in Victoria and Australia generally and much of the electricity industry remains more strongly vertically integrated than in Australia. Hence many of the AMI rollouts are the clear responsibility of the local distributor, e.g., Italy (ENEL) and Ontario.

There are a number of examples of approaches where AMI is being or has been considered in a market driven framework, however the Victorian Government is not aware of any market-wide rollout of AMI that has come about by market forces alone.

While the drivers for AMI can also differ in each jurisdiction, we are more concerned with learning from the overseas approaches to responsibility and implementation.

- In the United States many states moved to meter contestability in the late 1990s commensurate with the liberalisation of their energy markets. The view was that ownership and control of the meter was a way to better secure customers and a potential business opportunity in its own right.[18] Those parties that did pursue competitive metering found that the cost of installing the meters on a one-by-one, ad hoc basis led to higher than acceptable costs, with costs 5-6 times higher than via a mass deployment being cited.[19] Also, utilities became understandably wary of making new investments in metering and creating new potential stranded investment. As a result, the US has largely pulled back in this area as the following examples indicate;
  - The New York Public Services Commission recently made the following decision to overturn its competitive metering policy;

    > "In an Order issued August 1, 2006, the policy to encourage customer meter ownership and competitive provision of electric meter services to certain electric customers was continued….
    >
    > The Commission also took notice; however, of recent dramatic changes in electricity markets, including the steep increases in energy prices, volatility of prices, supply disruptions, expansion of demand for electricity, potential need for expensive new or upgraded transmission, distribution, and generation facilities, and recognition of the difficulties and environmental impacts associated with construction of these facilities.
    >
    > The Commission determined that these developments warranted a change from a policy based upon expectations that the competitive market would spur the development of advanced metering to a policy that relies upon electric distribution utilities to install the necessary advanced metering infrastructure to realize the State's energy policy goals. Accordingly, electric utilities were directed to file comprehensive plans for development

[18] This argument is also put forward as a reason for competitive metering in the NEM. However there is increasing recognition that what retailers really want is access to the data that AMI provides.

[19] *Cost Impact of Competitive and Network Metering In New York State – Final Report*, Arthur Anderson for New York Dept of Public Service, Nov. 1998

and deployment, to the extent feasible and cost effective, of advanced metering systems for the benefit of all customers."[20]

- California enabled competitive metering for its market in the late 1990s. Following the collapse of their market the CPUC has revoked competitive metering and has now approved proposals by the three main utilities to implement AMI to ensure the benefits of AMI can be achieved.

- In the UK, Ofgem considered the status of competitive metering and found the main barrier to the installation of AMI in a competitive metering market is the fear of customers switching. That is, the participants all feared paying for the cost of the new metering and its installation then losing this investment in some way when the customer switches to a new retailer. Nevertheless Ofgem retained its policy for supplier responsibility for metering.

  More recently the UK Department of Trade and Industry (DTI) in an energy white paper have established a policy, but not a mandate, for smart meter deployment. DTI states;

  > "Our expectation is that, within the next 10 years, all domestic customers will have smart meters with visual displays of real-time information that allow communication between the meter the energy supplier and the customer ….we expect suppliers to roll out smart meters when it is cost effective to do so and within the timescales we have set".[21]

  DTI welcomed the progress being made by suppliers (retailers), with the support of Ofgem, to remove barriers to the rollout of smart metering and noted that suppliers are considering the business case for smart meters in the domestic market.[22] Additionally DTI will ensure that real-time display devices are available free of charge to customers who request them between 2008-2010.[23]

  DTI's desire for an AMI rollout, which currently falls short of a mandate, is being stalled because of the policy for the assignment of metering responsibility.

- In the Netherlands competitive metering supply was introduced when the retail market was liberalised in 2002/3. More recently an economic analysis by Senter Novum for the Ministry of Economic Affairs indicated there are net economic benefits from a universal deployment of AMI. Senter Novum however concluded that the current arrangements for the ownership of meters was an obstacle to achieving a universal rollout, stating that, "The expectation is that in this manner, smart meters will never reach all households in the Netherlands"[24] and recommended that the obstacles to smart meter deployment needed to be removed.

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[20] State of New York Public Service Commission Advanced Metering Initiative (AMI), Case 00-E-0165, In the Matter of Competitive Metering. Available from web address; http://www.dps.state.ny.us/AMI.htm

[21] *Meeting the Energy Challenge A White Paper on Energy*, Department of Trade and Industry (United Kingdom), May 2007, p. 64

[22] Op Cit Department of Trade and Industry p. 64

[23] Op Cit Department of Trade and Industry p. 297

[24] *Recommendation Implementing smart metering infrastructure at small-scale customers,* Senter Novum, October 2005, p. 28

The Dutch Government agreed that the current situation of competitive metering was not achieving their objectives and had retarded innovation towards smart metering. Hence the Ministry of Economic Affairs decided that; in relation to the meter market, in principle, all small users in the Netherlands will be given a 'smart' meter, grid operators will be responsible for roll-out and the cost of the physical meter will be regulated.[25]

The Government as part of the mandate for a rollout of remotely read smart meters have reversed their previous policy on competitive metering and have given meter ownership exclusively to the Grid companies. This was a significant decision for the Government because there were many organisations that currently own meters however it is understood that these organisations will receive some compensation.

3. Introductory notes on the impact and choice of technology

The study report provides necessary background on the technologies that have been evaluated however a few relevant comments on the communications technologies are warranted.

With AMI there is considerable focus on the new meters. It is important to understand that the key enabler of AMI is actually the communications network and the related information systems hardware and software.

The choice of communication technology depends on the specific application. These applications can relate to meter density (customers per square kilometre or per substation), and rural versus urban/suburban environments.

The Victorian Government is technology neutral in its approach to AMI and has limited its role to defining a minimum functionality and service levels. The distributors are evaluating multiple technologies (eleven technologies are under evaluation) and will make the final decision as to what package of meter and communications technology meets the performance requirements given the physical environments across the State, customer density and topology.

Apart from the ability of the distributors to be able to coordinate and perform an efficient premise-to-premise rollout for all of their customers, density benefits arise from the nature of the communications. The most cost effective solutions all utilise a collection device or concentrator that communicates to each customer's meter. In the case of the distribution line carrier (DLC) technology each concentrator communicates with the customers' meters through the distributors powerlines downstream of the distribution transformer. Hence, where this technology would be employed a minimum of one concentrator is required per distribution transformer subject primarily to downstream power-line length and number of customers.

The concentrator itself communicates with the network communications centre using conventional communications systems including public telecommunications systems.

Hence density benefits frequently/typically arise from having only one collection device and associated communications system in a particular area. A retailer driven rollout could require multiple concentrators and communications systems per distribution transformer (if

[25] See Minister's statement via the following link;
http://www.ez.nl/dsc?c=getobject&s=obj&objectid=150866&!dsname=EZInternet&isapidir=/gvisapi/

DLC is used) increasing costs. For a small retailer with few customers in a local area a concentrator based system may not be cost effective as it would increase the cost per customer significantly and the system may be stranded if many customers churn. Hence a small retailer may consider adopting a more expensive but less risky point to point approach that does not involve concentrators; whilst such approaches may be cost-effective in certain scenarios, there would be many scenarios where retailers would regard this as a barrier to their participation in the market.

Similar issues exist with other non-DLC communications technologies, such as mesh radio, that have a direct dependency on communications device density to establish a robust communications network. The more competing metering communications networks in the same geographic area, the fewer the effective communications devices per network and consequently the poorer the performance (leading to eventual failure) of these networks.

Schedule 2

Sample drafting for proposed derogation

1. Definitions

Clause 9.3.1 of the Rules is amended by inserting the following definition in the table (in the correct alphabetical order):

AMI rollout	Means the rollout of advanced metering infrastructure provided for in the *cost recovery Order*.
cost recovery Order	Means the Order made by the Governor in Council under section 15A(2) and section 46D of the Electricity Industry Act 2000 (Vic) and published in the Victorian Government Gazette in August 2007.
relevant metering installation	Is defined in clause 9.9B.1(a).
start date	Has the meaning given in the *cost recovery Order*.

2. Advanced Interval Meter Rollout

The following new clause 9.9B is inserted immediately following clause 9.9A in Part A of Chapter 9 of the Rules.

9.9B Transitional Arrangements for Chapter 7 – Advanced Interval Meter Rollout

9.9B.1 Application

(a) This clause 9.9B applies to each *metering installation* for a *connection point* located in Victoria (other than a type 1 or a type 2 *metering installation*) in respect of which less than 160MWh per annum of *energy* is consumed by a customer and which:

(i) is installed on or after the *start date*, unless the *Market Participant* is the *responsible person* for such *metering installation* at the *start date* and the installation occurs in accordance with the ordinary replacement cycle of that *Market Participant*; or

(ii) was installed prior to the *start date*, unless the *Market Participant* is the *responsible person* for such *metering installation* at the start date,

(***relevant metering installation***).

(c) For the purpose of this clause 9.9B, volume consumption will be calculated in accordance with Schedule 2 of the *metrology procedure.*

(d) Clause 9.9B ceases to apply on 31 December 2013.

9.9B.2 Designation as Responsible Person (clauses 7.2.2 and 7.2.3(a))

Notwithstanding clauses 7.2.2 and 7.2.3(a), the *Local Network Service Provider* is the *responsible person* for any *relevant metering installation*, with the effect that:

(a) a *Market Participant* may not elect to be the *responsible person* for a *relevant metering installation* under clause 7.2.2(a);

(b) a *Market Participant* will not be the *responsible person* for a *relevant metering installation* under clause 7.2.2(b); and

(c) the *Local Network Service Provider* will be the *responsible person* as if the *relevant metering installations* were referred to in clause 7.2.3(a)(2).

9.9B.3 Terms and Conditions (clause 7.2.3(b) – (h))

(a) Clauses 7.2.3(b) and 7.2.3(c) will not apply to *relevant metering installations*.

(b) Clause 7.2.3(d) – (h) will apply to *relevant metering installations* as if the *relevant metering installations* were referred to in clause 7.2.3(d).

9.9B.4 Metering installation types and accuracy

A *Local Network Service Provider* may alter a *metering installation* in accordance with clause 7.3.4(e) – (g):

(a) in the circumstances described in clause 7.3.4(f); or

(b) for the purposes of the AMI rollout.

9.9B.5 Cost Recovery (clause 7.3.6(f))

Clause 7.3.6(f) will apply to the recovery of costs by a *Local Network Service Provider* associated with the provision, installation, maintenance, routine testing and inspection of *relevant metering installations*, as if the *relevant metering installations* were referred to in clause 7.3.6(f).

9.9B.6 Agency data collection systems and agency metering databases (clauses 7.3.5(c) and 7.9.1(b) – (b1))

For the purpose of clauses 7.3.5(c) and 7.9.1(b) – (b1) and despite anything to the contrary in any contractual or other arrangements between a *Market Participant* and *NEMMCO*, only the *responsible person* for any *relevant metering installation* may select the person to be engaged by *NEMMCO* to provide *agency data collection systems* and *agency metering databases* under clauses 7.3.5(c) and 7.9.1(b) – (b1), provided that such person complies with the service level requirements and other criteria established by *NEMMCO,* including accreditation requirements, referred to in clause 7.9.1(b1).

Sample drafting for proposed derogation in the event that NEMMCO's proposed rule change ("Integration of NEM Metrology Requirements") for first tier metering installation requirements is adopted.

1. Definitions

Clause 9.3.1 of the Rules is amended by inserting the following definition in the table (in the correct alphabetical order):

AMI rollout	Means the rollout of advanced metering infrastructure provided for in the *cost recovery Order*.
cost recovery Order	Means the Order made by the Governor in Council under section 15A(2) and section 46D of the Electricity Industry Act 2000 (Vic) and published in the Victorian Government Gazette in August 2007.
relevant metering installation	Is defined in clause 9.9B.1(a).
start date	Has the meaning given in the *cost recovery Order*.

2. Advanced Interval Meter Rollout

The following new clause 9.9B is inserted immediately following clause 9.9A in Part A of Chapter 9 of the Rules.

9.9B Transitional Arrangements for Chapter 7 – Advanced Interval Meter Rollout

9.9B.1 Application

(a) This clause 9.9B applies to each *metering installation* for a *connection point* located in Victoria (other than a type 1 or a type 2 *metering installation*) in respect of which less than 160MWh per annum of *energy* is consumed by a customer and which:

(i) is installed on or after the *start date,* unless the *Market Participant* is the *responsible person* for such *metering installation* at the *start date* and the installation occurs in accordance with the ordinary replacement cycle of that *Market Participant*; or

(ii) was installed prior to the start date, unless the *Market Participant* is the *responsible person* for such *metering installation* at the start date,

(***relevant metering installation***).

(b) For the purpose of this clause 9.9B, volume consumption will be calculated in accordance with Schedule 2 of the *metrology procedure.*

(c) Clause 9.9B ceases to apply on 31 December 2013.

9.9B.2 Designation as Responsible Person (clauses 7.2.2 and 7.2.3(a))

Notwithstanding clauses 7.2.2 and 7.2.3(a), the *Local Network Service Provider* is the *responsible person* for any *relevant metering installation*, with the effect that:

(a) a *Market Participant* may not elect to be the *responsible person* for a *relevant metering installation* under clause 7.2.2(a);

(b) a *Market Participant* will not be the *responsible person* for a *relevant metering installation* under clause 7.2.2(b); and

(c) the *Local Network Service Provider* will be the *responsible person* as if the *relevant metering installations* were referred to in clause 7.2.3(a)(2).

9.9B.3 Terms and Conditions (clause 7.2.3(b) – (h))

(a) Clauses 7.2.3(b) and 7.2.3(c) will not apply to *relevant metering installations*.

(b) Clause 7.2.3(ca) – (h) will apply to *relevant metering installations* as if the *relevant metering installations* were referred to in clauses 7.2.3(ca) and 7.2.3(d).

9.9B.4 Metering installation types and accuracy

A *Local Network Service Provider* may alter a *metering installation* in accordance with clause 7.3.4(e) – (g):

(a) in the circumstances described in clause 7.3.4(f); or

(b) for the purposes of the AMI rollout.

9.9B.5 Cost Recovery (clause 7.3.6(f))

Clause 7.3.6(f) will apply to the recovery of costs by a *Local Network Service Provider* associated with the provision, installation, maintenance, routine testing and inspection of *relevant metering installations*, as if the *relevant metering installations* were referred to in clause 7.3.6(f).

9.9B.6 Agency data collection systems and agency metering databases (clauses 7.3.5(c) and 7.9.1(b) – (b1))

For the purpose of clauses 7.3.5(c) and 7.9.1(b) – (b1) and despite anything to the contrary in any contractual or other arrangements between a *Market Participant* and *NEMMCO*, only the *responsible person* for any *relevant metering installation* may select the person to be engaged by *NEMMCO* to provide *agency data collection systems* and *agency metering databases* under clauses 7.3.5(c) and 7.9.1(b) – (b1), provided that such person complies with the service level requirements and other criteria established by *NEMMCO,* including accreditation requirements, referred to in clause 7.9.1(b1).

Schedule 3

AMI Rollout under current rules and arrangements

1. Specifying AMI rollout obligations for retailers

If retailers were to have the obligation for the deployment of remotely read AMI then, under current Rules and arrangements, they would be required to accept the role of responsible person or ask the distributor to perform that role. The responsible person would engage a metering provider and the retailer would nominate a metering data agent to collect and process metering data for the installation. In order to effect the Victorian Government's policy decision for a mandated AMI rollout over four years, those arrangements currently envisaged to apply solely to distributors (as a consequence of this proposed derogation) would be extended or modified to apply to retailers. This would include:

- setting, through an Order-in-Council under section 46D of the *Electricity Industry Act 2000 (Victoria)*, annual deployment targets for retailers in a manner similar to that established for distributors[26];
- each retailer providing to Government a clear and binding indication by each retailer of its intent to undertake the role of responsible person themselves or to nominate the relevant distributor to be the responsible person;
- each retailer demonstrating that the Government's timetable will be met;
- establishing mechanisms to provide for the application of penalties to those retailers who failed to achieve their mandatory targets;
- requiring retailers to submit to the Victorian Government their detailed implementation plans;
- requiring retailers to provide an indication to the Victorian Government of funding and/or cost recovery arrangements and, potentially, the specification of applicable metering asset, communications and data services costs;
- requiring contributions from retailers towards the costs of managing cross-participant coordination, including the AMI Project Office;
- retailers developing the capabilities to undertake prescribed functions on behalf of distributors, as well as the establishment of related regulatory instruments, and mechanisms to specify and enforce applicable service levels; and
- establishing default obligations and responsibilities on distributors where retailers are unwilling or unable (for financial reasons or otherwise) to assume the role of responsible person.

[26] The Victorian Government will be enacting, by way of an Order-in-Council under section 46D of the Electricity Industry Act 2000 (Victoria) a cost recovery framework to apply for the regulated recovery of costs by distributors related to specified obligations for the rollout of AMI. This Order-in-Council specifies annual (regulatory) AMI deployment targets for distributors.

The Victorian Government strongly believes that the industry-wide complexities and costs of establishing this framework, and the consequential diminution of economies of density and scale, will seriously jeopardise the achievement of the key policy objectives, and the broad societal benefits that underpin this policy intent.

Annexure A

[Letter to AEMC from Minister for Energy and Resources]