









Rule Change Proposal

Victorian Jurisdictional Derogation

(Advanced Metering Infrastructure

Submission of the Victorian Distribution Businesses in response to the AEMC Consultation

15 February 2008



RULE CHANGE PROPOSAL

VICTORIAN JURISDICTIONAL DEROGATION (ADVANCED METERING INFRASTRUCTURE ROLL OUT)

1 INTRODUCTION

The Australian Energy Market Commission (AEMC) has invited submissions on a request by the Victorian Minister for Energy and Resources for the making of a jurisdictional derogation from certain requirements of the National Electricity Rules (the Rules) to enable the implementation of advanced metering infrastructure (AMI) within that State by establishing the local distribution business as the exclusively responsible party for small customer metering.

This submission, on behalf of the Victorian Electricity Distribution businesses, Alinta AE, Citipower, Powercor Australia, SP AusNet and United Energy Distribution (the Distributors), fully supports the request as detailed in the Victorian Government's *'Rule Change Proposal (Jurisdictional Derogation) Advanced Metering Infrastructure Rollout'* (the Proposal).

2 THE AMI PROGRAM

The Victorian Government has mandated the rollout of AMI to all small Victorian electricity customers, with the rollout to be undertaken by the Distributors. By linking two-way communications with interval metering the Government seeks to deliver benefits such as reduced meter reading costs, remote connection and disconnection, and a platform for greater competition in electricity retailing, more cost reflective pricing and enhanced load management features.

The business case underpinning the Government's AMI policy decision is based on analysis that assumes that the local distributor would be the exclusive provider of AMI services. The mandated AMI program requires the distributor to deliver levels of functionality and service, as defined under an Order in Council, that have been the subject of extensive consultation with all impacted parties.

The distributors agree with the Government's conclusion that distributors are best placed to carry out the AMI program and that alternatives, such as retailers acting as the responsible persons, would result in:

- inefficiencies with potential for costly duplication;
- possible stranding of infrastructure when customers switch retailer;
- uncertainty as to how the network benefits can be realised; and
- possible barriers to customer switching with adverse effects on the competitive retail energy market.

The expected costs involved, the uncertainty surrounding technologies, their success in meeting the required performance standards and the tight timetable represent significant risks that would best be managed by distributors in an exclusive regulatory environment where the benefits are maximised and investment certainty is assured. Distributors and other industry participants have, in good faith, already expended significant investment, resources and time in assisting the Government in the preparation, trialling and early implementation stages of the AMI program. This work has been carried out on the strength of the Government's policy decision that the distributors would be exclusively responsible for the provision of AMI services and metering data services.

The Government's policy decision regarding distributor exclusivity in regard to AMI meter and meter data services was reached after careful and thorough analysis and is a fundamental feature of the regulatory framework established for AMI in Victoria.

3 THE CURRENT RULES

The current Rules provide for the distributor to be exclusively responsible for the provision of metering and meter data services for type 5, 6 and 7 metering installations for small customers. This exclusivity however does not extend to type 4 metering installations.

AMI metering installations are considered to be type 4 metering installations under the Rules due to the inclusion of the remote read functionality. This has the effect of elevating the metering requirements for small customers from the existing type 5 and 6 metering installations to type 4, a category previously required only for customers consuming more than 160MWh per annum. As a result, the existing obligation on a Market Participant to request an offer from the Local Network Service Provider (LNSP) to act as the Responsible Person (RP) under rule 7.2.3(d) is overtaken and replaced by rule 7.2.2 where the Market Participant has the option to act as the RP or ask for and accept an offer from the LNSP to act as the RP.

The provisions of the Rules are contrary to the AMI policy intention of the Government and regulatory framework established in Victoria.

4 THE PROPOSED DEROGATION

In summary the proposed jurisdictional derogation seeks to make the LNSP the RP 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."¹

Further the Proposal provides that:

"...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."²

The period of exclusivity would commence from the start date specified in an Order in Council to be made under the Electricity Industry Act (2000) (the EIA) in connection with the AMI rollout and continue until 31 December 2013, being one year after the intended conclusion of the AMI rollout.

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 LNSP will be the responsible person as if the relevant metering installations were referred to in clause 7.2.3(a)(2)."³

The derogation effectively provides a continuation of the current position under the Rules that distributors are responsible for small customer metering. Preserving this exclusive responsibility for AMI will assist in mitigating a number of key risks affecting efficiency, benefits and costs relevant to small customer metering as discussed below.

5 CONSIDERATION OF THE PROPOSAL

In giving consideration to the request, the AEMC is in part required to ensure that:

Under section 88(1) of the National Electricity Law (NEL) -

"...the Rule will or is likely to contribute to the achievement of the national electricity objective."

Under section 89 –

¹ DPI, 'Victorian Government Rule Change Proposal (Jurisdictional Derogation) Advanced Metering Infrastructure Rollout", August 2007, page 5.

 $^{^2}$ Ibid., page 14.

³ Ibid., page 5.

"(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)... "

Under section 92(3) -

"A request for the making of a jurisdictional derogation may specify a date on which the jurisdictional derogation, if made, will expire."

6 MEETING THE NATIONAL ELECTRICITY OBJECTIVE

The National Electricity Market (NEM) 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."

The Victorian Government in section 4.2 of the proposal clearly articulates how it perceives the proposed derogation would contribute to the NEM objective through:

- the promotion of the efficient use of electricity services;
- the promotion of efficient investment; and
- enhancing competition and therefore the long-term interests of consumers.

The Distributors support the arguments presented in the Proposal and provide additional arguments in the paragraphs below. Without the surety of exclusivity that the Proposal provides:

- the investment risk in AMI for the Distributors would be material and may become unreasonable for them to manage; and
- the Victorian AMI regulatory regime would be seriously undermined.

Efficient use

As a tool to promote the efficient use of energy, the Council of Australian Governments has committed to a national mandated rollout of electricity smart meters to areas where benefits outweigh costs. The Victorian Government has undertaken a cost-benefit study which identifies a net benefit to the community through a mandated rollout, by distributors, of smart meters to electricity customers within the State. AMI will provide an effective platform to facilitate more efficient pricing signals and the development of innovative electricity service offerings for customers. The functionality also provides the opportunity to communicate directly with customers through optional in home displays, further expanding the involvement of customers and providing choices that will facilitate a more efficient energy market.

A key aspect of the cost/benefit study indicated that there were benefits to consumers if a fixed infrastructure technology solution and an accelerated roll out were employed. Distributors are considered to be better placed to rollout this fixed infrastructure technology within the policy timeframes and achieve the overall benefits identified in the cost benefit study than a market driven rollout approach.

The Distributors have supported the Victorian Government in its approach to improving efficiency in the use of electricity and look forward to assisting retailers in providing other value added services through the AMI program.

Efficient investment

In regard to the matter of efficient investment, the metering and communications infrastructure required rely on scale and density to deliver the desired functionality and service outcomes cost efficiently and effectively. With the distributor focussing on its entire service area, the opportunity for achieving volume efficiencies in terms of asset procurement and installation costs can be optimised. The density of customer installations within a service area provides opportunities in terms of optimising the design and utilisation of key assets, such as the communications network, and particular components, such as data concentrators. The density factor will also assist in reducing travel times during the roll out and increasing the efficiency with which specialist resources can be used to support rollout crews.

Some AMI technologies, such as the mesh radio solution currently preferred by Victorian distributors for urban areas, rely on the density of installations for effective operation, ie the close proximity of meters is important to the effective operation of the mesh communications network. The lower meter density associated with a market driven rollout is likely to impact on the effectiveness of the communications infrastructure, requiring reconfiguration of the perceived benefits as early as possible. The level of customer density that distributors can provide, and consequently the benefits that this provides to the roll out of AMI, cannot be achieved by even the larger retailers.

Further, it is likely that the communications infrastructure used to facilitate the AMI program will make use of some part of the distributor's existing network assets, either as an integral part of the infrastructure or as a mounting platform. Therefore, distributors are best positioned to deliver a mass rollout across an entire distribution area while ensuring that duplication of infrastructure is avoided.

While it may be argued that larger retailers may be able to achieve scale economies comparable to distributors in relation to meter procurement and even communications infrastructure, the same argument is unlikely to hold for small or new entry retailers, thus limiting new competition. Further, given that a material part of the benefit to be derived from the program is based on distributor based functions such as meter reading, connections and load control, an adhoc approach to rolling out infrastructure would make the achievement of the perceived benefits almost impossible.

There is a significant amount of work to develop the business processes for a large scale rollout and for the new AMI functions. Developing these transactions to cater for multi-party and multi directional transactions with meter providers, meter data providers, retailers and distributors would add additional complexity and cost, and serve to delay the delivery of benefits to consumers. Large scale meter churn during the rollout period would magnify the complexities and the delay.

Long Term Interests of Consumers

Obliging distributors to exclusively provide the AMI services will benefit customers by ensuring:

- lower costs due to the inherent scale and density efficiencies available to distributors;
- lower metering prices through regulated cost recovery over the life of the metering infrastructure rather than the generally shorter term of retail contracts;
- the timely and efficient rollout of AMI will ensure that the maximum benefits are available at the earliest possible time;
- there is no economic barrier to small retailers, or new retailers, who may not be effectively able to provide metering to their customers due to scale and density effects, thus preserving the long term competitiveness of the retail electricity market; and
- there is no confusion about the provider of the metering services.

AMI creates opportunity for more innovative products and pricing structures. Distributors consider that the granting of the jurisdictional derogation requested will enhance competition in the retail electricity market without the risk of compromising retail competition. In particular, a customer's ability to switch retailers quickly to take advantage of an attractive offer will not be impeded by the existing retailer also being responsible for the metering. The derogation would avoid costly and inefficient meter churn and the barriers to switching it creates. The derogation also supports the smaller retailers or new retailers who may not have the capacity to finance and provide AMI infrastructure and services. Under the proposed derogation these services are available to all retailers at a regulated price.

Even in a distributors led rollout a significant proportion of costs will be subject to competitive tendering processes that can be expected to stimulate competition, particularly in the supply of AMI equipment and communications services. Many aspects of the installation process will also subject competitive sourcing.

The recovery of the costs incurred by distributors for the roll out of AMI will be regulated by a CPI-X price regime. Under this regulatory regime, the efficiencies provided by distributor exclusivity, as compared to a market led roll out, will be delivered to customers immediately through lower forecast costs and lower prices. In addition, the regulatory regime provides incentives for distribution businesses to pursue further efficiencies, and these efficiencies are shared with customers.

7 FACILITATES THE ORDERLY TRANSFER OF REGULATION

In section 5.1 of the Proposal, the Victorian Government states that its policy requires that the AMI rollout be progressed and that an orderly transfer to a national framework will be "...facilitated by ensuring that the interfaces between the Victorian instruments and existing national regulatory instruments are clearly specified."

Consistency and certainty in regulation in areas such as price regulation, cost recovery, service delivery and performance requirements are important features to any business seeking to manage investment risk. It is therefore critical to the Distributors that the regulatory framework in place at the commencement of the AMI rollout will move seamlessly in any transition process. The Distributors endorse the position argued by the Victorian Government in the Proposal and will continue to work with relevant parties at both a jurisdictional and national level across the AMI and national reform processes to support this position.

8 CONTINUES EXISTING REGULATORY ARRANGEMENTS

Sections 46C and 46D of the EIA and a series of Orders in Council administered by the Essential Services Commission set out the existing regulatory framework for the provision of the AMI program in Victoria. Distributor exclusivity in the provision of AMI services and metering data services for the period of the mandated rollout, ie the intent of the proposed derogation, is considered to be an integral part of that existing framework. It is the fundamental basis on which industry participants have progressed the delivery of AMI and without it the underlying business case for AMI would be compromised.

With the rollout period rapidly approaching distributors will need to make key procurement decisions on technology selection and metering for the roll out to proceed. Failure to proceed with the jurisdictional derogation as proposed would create uncertainty and is likely to delay the AMI rollout and thus delivery of the benefits perceived.

9 EXPIRY DATE

In the Proposal, the Minister has specified an expiry date of 31 December 2013, being one year after the intended conclusion of the AMI rollout. It provides a minimal time for the completion of outstanding issues from what is already seen as a tight rollout timetable.

Many of the arguments presented in support of the derogation are equally valid for a rule change that would provide an enduring exclusive role for distributors along the

lines currently provided for type 5, 6 and 7 metering installations. Development of the National Smart Metering program is likely to require the issue of roles and responsibilities under the Rules to be further examined, which would provide a forum to further consider these issues. The distributors strongly support the Victorian derogation proceeding whilst these longer term issues are assessed.

10 OTHER ISSUES

In presenting the Proposal for a jurisdictional derogation the Victorian Government has made a number of additional supporting arguments. These include:

• Uncertainty

A distributor lead rollout provides greater opportunity for ensuring distributor operational benefits are achieved and will overcome any issues associated with retailers gaining access to distribution assets.

• Duplication of assets

There is less likelihood of duplication of assets and the possibility of stranded assets resulting from future customer churn.

• Facilitation of cost recovery

Cost recovery arrangements under a distributor led process are significantly less complex. Costs are tested in a regulatory price setting process and can be equitably shared across all customers.

• Effect on customer transfer

A retailer led rollout may impact customer transfers and incentivise retailers to 'lock-in' customers to ensure cost recovery. This is exacerbated in the case of small customers where meter churn costs could represent a significant cost compared to any potential savings and therefore create a barrier to switching.

The Distributors support the Victorian Government's position on these matters.

11 METER CHURN

In addition to the economic inefficiency of meter churn, the National Electricity Market Management Company (NEMMCO), in a draft paper currently out for consultation entitled '*Financially Responsible Market Participant Meter Churn Guidelines*' lists a number of impacts of meter churn noting that '*Meter churn impairs the performance and delivery of metering data and standing data to market participants for a connection point...*' (section 2.5). Some of the impacts discussed by NEMMCO include:

- Retail transfer and RP a change to the metering installation may impact the ability of the current RP to meet Rule obligations for the connection point;
- Change to Metering Data Provider (MDP) the requirement to 'hand over' connection point information between the service providers requires the new

MDP to provide services to meet the performance deliverables of another MDP;

- Change to Metering Provider B (MPB) necessitates re-validation of the metering installation details between the new RP and the new MDP. Whilst this validation can take place in readiness for transfer, the new standing data details cannot be updated into the Market Settlement and Transfer Solution (MSATS) until the new MPB and MDP role responsibilities become active;
- Metrology changes to the metering installation management of the metering data through the meter change day is complicated. MDPs are required to adjust or aggregate sets of metering data and to facilitate the alignment of the data streams across metrology changes; and
- Meter churn will for various periods of time, have any number of the following effects:
 - Temporary impairment in delivery of quality metering data;
 - Meter type changes may necessitate aggregation and complicate billing processes;
 - Delays in standing data updates into MSATS, hence metering details may not reflect installed equipment for a period of time;
 - Contractual obligations are impaired with service providers ;
 - Possible inaccuracies in network billing;
 - Possible inaccuracy of prudential, forecasting and hedging assessments;
 - o Increased B2B processing and industry queries; and
 - Increase in consumer queries.

Distributors are the RP, MDP and MPB for the bulk of metering installations to be replaced by the AMI program. By maintaining distributor exclusivity for AMI services and metering data services as proposed under the jurisdictional derogation, a single entity is responsible for meter exchange and many of the impacts of meter churn can be minimised at a time of high installation volumes.

12 SERVICE AND OPERATIONAL ISSUES

A concern often expressed by retailers relates to a perceived lack of responsiveness and innovation by regulated monopoly service providers such as distributors. A number of safeguards have been provided in this respect:-

• the AMI minimum functionality and service levels have been the subject of extensive consultation to ensure a sound basis;

- there are express provisions in the Functionality and Service Level Order-in-Council gazetted on 12 November 2007 (see clause 5) which ensures that retailers are able to negotiate for enhanced functionality or service levels, including an appeal mechanism if retailer believes that an offer for enhanced services is not fair and reasonable; and
- the National Metrology Procedure, currently undergoing consultation for the harmonisation of first tier metering, also provides a reasonable opportunity for a retailer to request metering services of a type that is different from that already installed or provide facilities in addition to that which an LNSP would otherwise install. (see clause 2.7.2 of National Metrology Procedure consultation draft released by NEMMCO dated 25 January 2008).

Further, the Distributors believe that a Distributor led rollout will:

- provide certainty for distributors in developing value adding operational functionality and network management techniques;
- provide greater certainty and concurrency in the management of metering installations. An adhoc approach will affect the efficiency of reading routes and will raise standing data and role management issues associated with retailer churn;
- limit the complexity and need for change to business-to-business processes and the establishment of new service order process flows that would arise from retailers taking on 'traditional' LNSP roles; and
- limit the need for switching obligations to be placed on retailers that are consistent with relevant distribution obligations.

The Distributors fully support the position argued by the Victorian Government in the Proposal and endorse their request for the making of a jurisdictional derogation from certain requirements of the Rules.