

11<sup>th</sup> October 2012

Mr Eamonn Corrigan  
Director  
Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

#### AEMC Review

**Power of Choice – giving consumers options in the way they use electricity**

Ref: EPR0022

Dear Eamonn,

Metropolis Metering Assets Pty Ltd (Metropolis) is an AEMO accredited Metering Provider and Metering Data Provider and has been operating in the National Electricity Market since 2007 when we installed our first residential smart meter in the suburb of Ivanhoe, Victoria. Since then we have assisted thousands of residential customers access better market information and products by providing reliable and cost effective metering and data management services.

Our smart meters are true smart meters – registered in MSATS as Type 4 metering installations – and our network extends across Australia, from southern Tasmania to far-north Queensland, and places as diverse as Mallacoota and Minnipa.

Our meters measure electricity consumption in 30-minute intervals, can be remotely reprogrammed for bi-directional in the event that solar panels are installed, and can even

measure the electrical output from inverters to provide residential consumers with a complete picture of their consumption and how much solar electricity is actually consumed in the home.

Data is collected daily and provided to AEMO and appropriate market participants, as required by the National Electricity Rules, for billing and settlements. In addition, consumers have access to their data through a secure, password controlled web-service – the first launched in Australia for residential customers.

In February 2012 Metropolis was awarded Innovation of the Year at the 2012 Australia & New Zealand Smart Metering Awards held in Sydney. Judged by an independent panel of industry professionals and energy company executives involved with major smart metering projects across Europe, the awards recognise companies that play a defining role in moving the smart metering industry forward and focus particularly on outstanding achievements in technology innovation and customer service.

Metropolis won the award for its innovative Critical Peak Price messaging system, which allows retailers to initiate and broadcast price warning alerts via email, SMS, telephone voice broadcast, and to in-home display units – enabling electricity consumers to modify their consumption behaviour in order to avoid higher prices. Last summer Metropolis issued over 20,000 individual alerts. The system has also been adapted to provide consumers with alerts relating to energy usage caps, solar generation thresholds and meter alarms following the daily collection of smart metering data.

As the Commission has noted, demand side participation requires access to information, which has been denied consumers since market inception because innovative service providers – like Metropolis – have been denied access to a fair, free and open market.

When contestability was introduced four market pillars were envisaged – retail, generation, distribution (including transmission) and metering – built on a firm foundation of policy and regulation to support consumers.

But even before full retail contestability had been established Chapter 7 of the National Electricity Rules (formerly the National Electricity Code) was amended so that Distribution businesses were the exclusive Responsible Person for Types 5 & 6 metering installations. No-one questioned whether Distribution businesses should be allowed to appoint themselves exclusively as Metering Provider and economic regulators allowed all metering costs to be bundled into network charges, consolidating the position that metering services were exclusively provided by the Distributors.

In 2005 the Victorian State Government announced that it would mandate a Distributor exclusive rollout of residential smart meters – culminating in a lengthy review of and finally a derogation to the National Electricity Rules preventing Retailers from nominating themselves as Responsible Person, in Victoria, to implement Type 4 residential and small business smart metering from 1<sup>st</sup> July 2009.

In 2007 the Ministerial Council on Energy (now referred to as the Standing Council on Energy and Resources) established a Smart Meter Working Group and by June 2008 had endorsed Distributors as the most appropriate party to manage any smart meter rollouts.

Finally, in 2010, Part 8A was introduced to the National Electricity Law to grant State Energy Ministers power to invoke Distributor exclusivity for the rollout of smart meters.

From the very outset the policy and regulatory foundation that supported contestable residential metering services was gradually undermined and not surprisingly, the fourth service pillar envisaged for the market – metering – has collapsed.

Today there can be no confidence to make a commercial investment in smart meters because Part 8A of the National Electricity Law hangs over our heads. Metropolis cannot secure the necessary funding while Part 8A remains in place.

For new market entrants, at least two years lead time is required to develop the systems and processes and obtain the necessary accreditations in preparation for a rollout. That's a two years lead time and millions of dollars just to get to the starting block. But who is going to make such an investment when an impatient State Government could enact Part 8A at anytime?

Yet the Commission notes that no State Government has plans for a government-mandated roll-out of smart meters.<sup>1</sup>

Meanwhile Distributors have made no investments in smart meters at all. So called 'first generation' smart meters are, in fact, manually read (Type 5) interval meters and offer no advanced capabilities to support demand side participation. Even under the Victorian AMI Meter Rollout the meters are classified in MSATS as Type 5.

Millions of residential customers across Australia remain on manually read accumulation (Type 6) meters and, as also noted by the Commission, Distributors have little incentive to

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<sup>1</sup> Draft Report – page 45



invest in other than manually read meters as they cannot seek regulatory approval for smart metering expenditure as it is, correctly, classified as a contestable service.<sup>2</sup>

Smart metering policy and regulation is now at a point where no parties are prepared or able to move at all. The development of metering services in Australia has calcified and it is the electricity consumer that is the poorer for it.

Metropolis has read the Commission's draft report with great interest and fully supports the Commission's key recommendations and specifically its model for the provision of competitive metering services.

Metropolis agrees that if consumers have the right to directly contract with an AEMO accredited provider for metering services that in most circumstances choice would be facilitated by the Retailer. The recommendation works to encourage Retailers to enhance their service offerings to consumers.

Metropolis also endorses the recommendation that all new and replacement meters be smart meters. This compels all market participants to adopt smart metering processes and systems, encourages new market entrants with immediate scope for building market share, and re-directs investment from manually read metering to smart metering.

There is a very real appetite for commercial investment in smart metering deployment for residential and small business customers. But there must be several policy and regulatory changes to compel Metropolis and other new entrants to make such investments:

- Part 8A of the National Electricity Law must be repealed;
- policy statements made by Government must support competition and retract earlier positions that endorse Distributor monopolies;
- metering asset and service charges must be unbundled from network charges so that there is greater transparency;
- there should be no exit fees to opt out of a Distributor's metering service and no exit fees payable to contestable service providers unless there is a prior contractual agreement;
- ring fencing guidelines must be strengthened so that Distribution businesses cannot favour their own related metering services business or discriminate against contestable metering services providers; and
- meter installation must be removed from the NSW Accredited Service Provider Scheme.

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<sup>2</sup> Draft Report – page 53

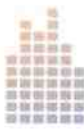
The Commission has raised a number of questions for respondents to consider and as Australia's leading provider of residential smart metering services we have addressed those dealing with our area of expertise (data management and metering services) while leaving questions concerning demand side participation models and pricing principles to others best placed to comment. Our responses are contained in the following attachment.

We thank the Commission for the opportunity to participate in the review.

Sincerely,



Marco Bogaers  
Chief Executive Officer



What should be the minimum standard form and structure of energy and metering data supplied to consumers (or their agents)? Should these arrangements differentiate between consumer sectors (ie. industrial/ commercial and residential)?

Metropolis agrees that energy and metering data must be readily available to consumers.

The first consideration that needs to be made in relation to data access is security and the protection of consumer privacy.

Metering data is provided in relation to a connection point (identified by its NMI) through which electricity is supplied to a home or business. The information is unique to the consumer(s) at a particular property and must not be disclosed to third parties.

Customers may move in and out of a property without a change in Retailer or customers may choose to switch Retailers without actually moving.

Only electricity Retailers are aware – through the ‘electricity billing account’ – of the identity of the account holder(s) and the period for which they held an account in relation to a connection point.

Metropolis agrees, therefore, with the form of the draft recommendation that proposes to clarify the requirements on a Retailer when consumers request access to their energy and metering data.

No other party, in our opinion, should be making metering data accessible to consumers. Only Retailers are in a position to authenticate the right of access to data and to limit access to the account holder(s) current at the time.

Metering data is as sensitive as financial transaction and telephone usage information. Financial institutions and telecommunications service providers will not provide information to any party other than the account holder(s).

Distributors, metering data providers and third parties are not in a position to authenticate access.

How would the Commonwealth Government, for instance, know that Mr & Mrs J Smith resided at 4 Kingswood Way? How would the Commonwealth Government know the period of residency was from 12 August 2008 to 26 November 2010? And how would the Government know that the electricity account was in the name of Mr Smith alone?

If Mrs Smith requested metering data from the Commonwealth Government, would access to the data be allowed?



If Mrs Smith enquired about a financial transaction on her husband's ANZ VISA Card and the card holder account was in Mr Smith's name alone then the ANZ would (and very rightly) deny her request.

Any request for access to metering data by a person that is not or was not an account holder for the relevant period must be denied.

Metropolis suggests the following minimum data access standards:

1. Retailers are responsible for authenticating data access with access to energy and metering data granted only to the account holder(s) for the period that the relevant electricity billing account was current.
2. Data access to be made available through login and password controlled web services.
3. Minimum form and structure of data made available on-line must be accessible as:
  - a. 30-minute interval data in data streams collected from the metering and used for billing (for example, 30-minute import and export data streams must be available where bi-directional metering installed) ; and
  - b. aggregated values as applied against the tariff structure(s) relevant to the account.

Metropolis does not consider that these arrangements need to be differentiated between industrial/commercial, small business or residential consumer sectors. We caution that the distinction between these sectors can at times be arbitrary and that having different rules or requirements based on sectors will add unnecessary complexity.

Best, in our opinion, to settle on a minimum standard that applies to all consumers equally.

**When do you think it is appropriate for a retailer (or responsible party) to charge a fee for supplying energy and metering data to consumers or their agents?**

Metropolis agrees with the Commission's view that residential and small business customers will primarily have access to energy and metering data through the continued rollout of web portals and on-line facilities designed to help them monitor and manage their electricity use.

However, Metropolis does not agree with the Commission's statement that "most residential and small business consumers do not want to spend time trying to decipher raw energy or metering data." There is no basis for this statement as few customers currently have access to the data and no-one knows for sure how such data would be used if access was more freely available.

Metropolis is, as far as we are aware, the only company that has implemented a Retailer web-service to allow residential customers to download metering data to a spread sheet format. This has been available since 2008. Data can be downloaded as 30-minute data by day, daily total by month or monthly total by year.

Metropolis's approach has simply been that any graphical representation of metering made to a consumer also be available for download.

Appendix 1 illustrates the structure and content of the 30-minute data download file available from our Retailer web service for residential consumers. The Commission will note that the information is presented in a simple and quite intuitive format that in a spread sheet program can be easily manipulated by consumers themselves.

While we have not undertaken a quantifiable study of the use of the facility, anecdotally we know that there are customers that regularly download data and use the data. The daily total by month download has been particularly useful for customers to validate their electricity bills.

Metropolis's approach has been to enable downloads directly from each Retailer's log-in and password controlled web service. However, Metropolis is not of the opinion that regulation should prescribe that downloads be available from web services – only that Retailers must respond to the request for data download. A web based data download facility is a logical extension of the secured web service but it is not the only solution and Retailers must always be free to consider and explore alternatives.

Data downloads must, first and foremost, be facilitated for the consumer. Metropolis considers that consumers should have a reasonable opportunity to download data at least



once at no additional cost in a format that can be readily stored and opened by the consumer on a home computer using a readily available spread sheet program.

Metropolis suggests the following base service level:

1. a minimum period (of say 3-months) to download or request a download of 30-minute interval data relevant to a particular day;
2. first download file for a particular day of data be provided at no charge;
3. data be provided in a file format that can be opened and manipulated in any readily available spread sheet program (noting that there are many spreadsheet programs available that consumers may wish to use – such as Microsoft Excel, LibreOffice and Google Spreadsheets); and
4. data download rules and applicable charges must form part of the energy price factsheet/product disclosure statement.

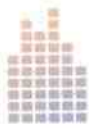
Metropolis points out to the Commission that energy service companies (ie. consultants, managers and brokers) use metering data as the raw product on which their services and revenues are based. It is therefore entirely appropriate to charge for downloads over and above the base service level (that is, where the data download access available to consumers is insufficient).

There is a cost in storing and disseminating metering data and charging for downloads outside the base service level is a fairer system that means consumers less reliant on downloads are not subsidising costs for consumers more reliant on data downloads. A user pays model minimises the costs that might otherwise be spread across all consumers.

Metropolis anticipates that requests for data from energy service companies will generally be for file formats that can be loaded into databases and/or contain large volumes of data and/or contain historical data records.

Metropolis suggests the following:

1. any request for data over the base service level must be submitted by the account holder(s) to the Retailer in writing so that the right of data access can be authenticated (this is in line with the Commission's recommendation that a form of explicit informed consent be provided to the Retailer);
2. the Retailer may charge a fee for providing metering data to the consumer or an authorised agent of the consumer where:
  - a. the data has previously been provided to the consumer or an authorised agent of the consumer;
  - b. the amount of data exceeds a minimum volume threshold (say three months);



- c. any data is older than the initial period in which data can be requested at no charge (say the first three months);
- 3. data be provided in a spread sheet file format or alternatively in the industry standard NEM12 data file format as specified by the consumer or an authorised agent of the consumer; and
- 4. the Retailer may charge (or quote) a fee for data provision in a non-standard file format or for the regular delivery of data files to the consumer or an authorised agent of the consumer.

**Do you agree that existing rules and guidelines should be amended to clearly outline the circumstances when distribution businesses are able to directly contract with residential and small consumers to deliver DSP network management services/programs?**

Metropolis does not consider that Distributors should, under any circumstance, have direct contractual relationships with consumers.

Distribution businesses are licensed to own and operate assets for the distribution of electricity to consumers on the basis that those assets cannot be readily duplicated to form a contestable market. For this reason the costs and revenues of the Distribution business are regulated in order to ensure a fair return for shareholders while protecting consumers from excessive and unreasonable prices.

Ring-fencing provisions exist to ensure that economic regulators can properly identify the costs and revenues associated with the provision of Distribution services. It is important that costs and revenues associated with contestable services are separated so that those services are not unfairly subsidised and to ensure that costs for non-regulated revenues are not also included when determining regulated revenues.

It is extremely important that the line between contestable and non-contestable services not be blurred.

While it can be argued that the development and delivery of DSP network management services and programs, in their purest form, falls within the scope of non-contestable Distribution services, it is very likely that they will rapidly evolve to include contestable components. The provision of DSP related products, for instance – such as direct load control, in-home displays, smart appliances, home area networks and web portals – is contestable and must not be marketed, promoted, offered or provided by Distributors in competition with Retailers and other service providers.

Metropolis is itself concerned that ring-fencing guidelines are insufficient to prevent Distributors from providing consumer access to data, which they receive simply by merit of the role they play in the market and the need to issue network bills.

In this regard we point out to the Commission that metering data is provided to Distributors by AEMO accredited Metering Data Providers, and that metering data provision is a contestable service. All Distributors have metering services divisions and subsidiaries whose services are supposed to be ring-fenced.

Under Chapter 7.3A(a) of the National Electricity Rules it is the Retailers that pay for the provision of meters and the collection of data from service providers, regardless of whether or not they are the responsible person that has appointed the service provider.



It is of considerable concern therefore, that companies like Jemena are offering web services in competition with Retailers.

Putting aside the security and privacy implications, Retailers are right to be concerned that Distribution businesses may ultimately use their position to garner a direct relationship with consumers – through the provision of web services, through the provision of DSP programs, and other such initiatives – to then go on to develop a presence in the market as a Retailer.

Metropolis considers that the existing rules and guidelines must be strengthened so that monopoly Distribution functions operate with legal and accounting separation, and independently of any other entity owned and operated by the Distribution business that provides contestable services.

Existing rules and guidelines must be strengthened so that monopoly Distribution businesses cannot cross-fund, cross-subsidise or cross-promote its contestable service entities.

Existing rules and guidelines must be strengthened so that monopoly Distribution businesses cannot use the privileged information they have access to – such as metering data – to develop contestable services in competition with the very service providers that have made such data available in the first place.

The development of DSP network management programs and services is an important market development. But such programs must be developed in conjunction with and marketed by the Retailers.

Besides which, if Distributors were to contract directly with residential and small business customers are they going to bill customers directly? Are Distributors really prepared to take on the credit risk and develop billing systems for individual customer accounts? Not to mention the confusion for consumers in dealing with two companies for the delivery of the one service?

The reality is that the Distributors would more than likely expect that the Retailers continue assume the credit risk and maintain responsibility for billing.

In our opinion it is preferable for a single contractual relationship between the Retailer and the consumer.

Should the minimum functionality specification for meters be limited to only those functions required to record interval consumption and have remote communication? Alternatively, should the minimum functionality include some, or all, of the additional functions specified in the SMI Minimum Functionality Specification?

Having operated in the contestable metering services market for over 5-years, Metropolis is very strongly of the view that the minimum functionality specification for meters be limited to only those functions required to record interval consumption and have remote communication.

Metropolis considers that the current metering installation types (ie. Types 1-6) defined within the National Electricity Rules, and the guidelines governing measurement accuracy and compliance for those metering installation types, are sufficient as minimum standards.

Metropolis is in no way suggesting that the range of metering functions be limited. Quite the contrary – we want to ensure that range of functions and technical capabilities is as broad as possible and, importantly, that there is scope within the market to explore new technologies, functions and capabilities.

A broad functional specification only attempts to anticipate the future technological needs of market and the only certainty is that the assumptions/conclusions will be proved wrong.

There is no better divining rod for what the market needs than demand itself.

In the 5-years that Metropolis has been operating in the residential smart metering space we have introduced many innovative functions, including:

- meter self-registration;
- remote special reads that can be initiated from a Retailer's or even consumer's desk top with response times of 6-10 seconds;
- Retailer initiated remote energisation and de-energisation – with response times of 20-30 seconds;
- quality of supply alerts;
- meter event reporting;
- solar generation metering (ie. bi-directional metering with additional measurement of the inverter output);
- critical peak price messaging – via SMS, email, telephone and in-home display;
- low generation alerts to advise of unplanned shut-downs to operators of unmanned generation plant;
- home area networks;
- in-home displays with real time messaging (such as CPP);



# Metropolis

- hot water load control metering;
- load control de-energisation;
- tamper detection;
- remote firmware upgrades;
- remote reprogramming & meter configuration; and
- remote time switch resetting.

Metropolis is not subject to any minimum functional specification other than Chapter 7 of the National Electricity Rules – yet we have deployed meters capable of a range of functions in order to meet market needs.

Added functionality is a commercial imperative where there is contestability.





Does the separation of the provision of metering services from retail energy contracts remove the need for meter churn when a consumer changes retailer? Does this cause any unforeseen difficulties or create any material risk? Are there any alternative approaches to reducing the need for meter churn?

Metropolis does not agree that there is a significant risk of a meter being replaced each time there is a change in Retailer.

Metropolis has been deploying residential smart meters since 2007 and the incidence of residential meter churn is extremely rare.

Existing market processes very simply accommodate transfers with any existing meter, Metering Provider and Metering Data Provider. In 2007, MSATS NMI Discovery was updated so that Retailers can now readily identify the current Metering Provider and Metering Data Provider registered to a connection point.

While Metropolis has installed residential smart meters at the request of only six Retailers in the market, due to residential customer transfers we now service sixteen individual Retailers.

The only additional change that Metropolis foresees as a compulsory requirement is the inclusion of a service provider fee code in MSATS – similar to a network tariff code – so that Retailers know what charges will be levied for metering services by a particular provider before a transfer proceeds (an oddly obvious omission from current processes).

Neither is Metropolis fearful of meter churn. The fact is that meter churn is more predominant in the commercial sector of the market because it is a low-volume/high-margin sector where costs are rapidly recovered. In the high-volume/low-margin sector that is residential and small business it simply doesn't make commercial sense for parties to routinely churn meters.

Only where there is a sound business case will meters be churned – say for the deployment of a new, previously unforeseen value added feature or service. And it is right that such opportunities should always remain open to encourage new competitors to the market and to keep existing operators like Metropolis on its toes.

Metropolis does not consider that any rule changes are required to attempt to regulate or control meter churn.



**Are there sufficient potential metering services providers to facilitate a contestable roll out of AMI?**

Metropolis is aware of a number of organisations prepared to enter the metering services market as AEMO accredited service providers and the Commission can be confident that there are sufficient potential metering services providers to facilitate contestable smart metering.

As an AEMO accredited Metering Provider and Metering Data Provider, and the leading provider of contestable, residential smart metering services, Metropolis fully supports the Commission's proposed model.

### Does the proposed model mitigate all the material risks of a contestable roll out?

Metropolis does not consider that there is any material risk in the competitive provision of residential and small business smart meters and we welcome the opportunity to play a far bigger role in the emergence of a world leading, Australian smart metering industry.

The draft recommendation to install smart meters whenever a refurbishment, new connection, or replacement is required, and on an accelerated basis for large residential and small business consumers (whose annual consumption a defined threshold) is an essential component of the model as it will spur the market to immediate action and provides a firm basis for process and system design.

But if there is no such requirement then we consider it likely that the market will remain inert for a lengthy period for two reasons.

The first is that Retailers may be reluctant to test the first mover advantage. The argument is that first Retailer to incur the additional costs for a smart metering program will be disadvantaged against the Retailers that waits for a further year or two. While the counter argument is that the first Retailer will of build a larger share of customers that benefit most directly from smart meters, there will always be a period when Retailers all wait to see who moves first.

The second is that many Retailers are reluctant to assume the role of Responsible Person because of its compliance implications and technical focus.

Metropolis has always considered that the technical compliance functions of the role must sit with the Metering Provider. In fact, Metropolis has contractually assumed the role of Responsible Person for many of its Retailer clients.

The role of Responsible Person is a legacy function that we believe has no further relevance and should be removed from the National Electricity Rules and other regulations.

The National Electricity Rules can be amended to refer to either the (Financially Responsible) Market Participant or the Local Network Service Provider in rules relating to the choice of Metering Provider and to the Metering Provider to all clauses relating to technical responsibilities.

So for instance, Clause 7.2.2 might be amended to read:

A Market Participant must nominate the Metering Provider for a type 1, 2, 3 or 4 metering installation connected to, or proposed to be connected to, the Local Network Service Provider's network.



And Clause 7.2.3 might be amended to read:

The Local Network Service Provider must nominate the Metering Provider for a type 5, 6 or 7 metering installation connected to the Local Network Service Provider's network in accordance with paragraphs (x) to (y).

The clauses remove reference to the Local Network Service Provider acting as the Metering Provider since these roles must be properly ring fenced and removes the reference for a "type 5, 6 or 7 metering installation *proposed to be connected* to Local Network Service Provider's network" as all new meters must be smart meters.

Clause 7.2.5 might be amended to read:

The Metering Provider must for each of its metering installations:

- (a) ensure that the installation is provided, installed and maintained in accordance with the Rules, the metrology procedure and procedures authorised under the Rules;
- (b) ensure that the components, accuracy and testing of the installation complies with the requirements of the Rules, the metrology procedure and procedures authorised under the Rules;
- (c) ensure that the security control of the installation is provided in accordance with clause 7.8.2;
- (d) here remote acquisition is used or is to be used for the collection of metering data ensure that a communications interface is installed and maintained to facilitate connection to the telecommunications network;
- (e) ensure that AEMO is provided (when requested) with the information specified in schedule 7.5 for new or modified installations;
- (f) not replace a device that is capable of producing interval energy data and is already installed in a metering installation, with a device that only produces accumulated energy data unless the metrology procedure permits the replacement to take place;
- (g) allow the alteration of the installation for which that person is responsible with another installation in accordance with clause 7.3.4; and
- (h) engage a Metering Data Provider (unless that person is a Metering Data Provider) to provide metering data services between the metering installation and the metering database and to parties entitled to that data under rule 7.7(a).

The 'Responsible Person' designation in MSATS can be changed to 'Metering Provider Nominee' with no further system or procedure modifications required to implement the rule change.

Metropolis is concerned about the NSW Accredited Service Provider (ASP) Scheme, introduced to provide customers with price transparency and choice for connection services that would otherwise be provided on a monopoly basis by the local Distributor.

For some reason, metering services has come to be included within the definition of connection services and application of the scheme. The conundrum is that there is no need to enforce metering services contestability under the ASP Scheme as such services are already contestable but, nevertheless, Metering Providers are required to comply with the ASP Scheme and use only ASP accredited service providers to complete meter installations.

This has caused very specific problems for Metropolis in relation to deploying residential and small business smart meters in New South Wales.

The ASP Scheme requires that accredited service providers pay the relevant Distributor a fee upon lodgement of a Notice of Service Work (NOSW) form. This fee is used to administer the operation of the scheme and to physically inspect random sites to ensure network compliance.

The fee is moderate in relation to a connection service but out of proportion for a metering exchange.

Only in NSW are we required to pay the Distributor each time we exchange one of their meters.

We have also had significant difficulty resourcing projects because while there are approximately 27,000 licensed electricians in NSW, under the ASP Scheme we are restricted to using only the 1,250 electricians accredited for connection services. That's a ratio of 1 electrician accredited under the ASP Scheme for every 22 electricians licensed to operate in NSW.

In any other State Metropolis is able to train local electricians so that the cost of each residential meter exchange is \$45-\$65, depending on phasing.

But with the restrictions placed on us by the ASP Scheme the cost of each meter exchange in NSW is over \$335 – five to six times higher than in other States.

This significantly restricts the ability to rollout smart meters on a commercial business in NSW. It simply is not cost effective.

In our opinion the review should recommend to the NSW State Government that metering services be removed from the ASP Scheme or at least that AEMO accredited Metering Providers be exempted from the ASP Scheme so that NSW can participate in the

introduction of residential smart meters on a mass-scale, unimpeded by additional and unnecessary cost.



### Should a monopoly roll out be adopted?

There is any number of monopoly models that might be considered. Geographical areas could be defined and put to tender the basis of 10-year, 15-year or 20-year franchises, for example.

However, Metropolis does not consider that monopolising Metering Provision and other related services is in the best interests of consumers. Monopolies stagnate and the only certainty is that the scope for innovation diminishes.

Metropolis is opposed to a market that is closed and inaccessible, that discourages new entrants and serves to protect under performing incumbents.

Metropolis is most opposed to any form of Distributor monopoly. Either where the Distributor provides metering services or where it is directly responsible for the choice of service provider.

Given their fettered position by Government over the past ten years, Distributors have done very little to advance the cause of smart metering within Australia.

The Managing Director of Ausgrid is quoted as saying in relation to smart meters:

Is the business case in place? I'd have to say it's not. Victoria is a very good example of that. All the meters have been deployed, but there is not a single product on those meters and the customers are not getting a single benefit.<sup>3</sup>

In fact all the meters installed in Victoria are categorised in MSATS as Type 5 meters.

..... to ensure the AMI rollout went ahead without too much delay, it was decided that AMI meters would not have a different designation for meter install code but would be identified only as MRIM (Type 5) meters. On more than one occasion AEMO tried to introduce a meter Install Type code specific to the AMI meter type but this was rejected by industry each time.<sup>4</sup>

Even though the AMI service levels require that no less than 95% actual data be available by 6am the following day, it is difficult to see how Retailers would implement an alternate process for the same metering type just because data is delivered more frequently. Type 5 meters are generally dealt with by aggregating data as though read as Type 6 basic accumulation meters and this is likely to continue unabated.

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<sup>3</sup> Smart meters given a fail – The Age, 4 October 2011

<sup>4</sup> Email from AEMO dated 14 February 2012

Ausgrid claim to have installed “400,000 first generation smart meters” since 2006 under its \$170 million smart grid program, which was awarded \$100 million by the Federal Government to develop commercial-scale smart grids under the *Smart Grid, Smart City* demonstration project.<sup>5</sup> The project is intended to provide instant information about the network to make it more efficient and help reduce interruptions, support more renewable energy and give households greater control over their energy use.<sup>6</sup>

Yet in explaining the functions of these meters on its website Ausgrid states that “(it) will still visit your home every three months to read the meter”.<sup>7</sup> In truth Ausgrid has installed nothing more than manually read interval meters.

This was evidenced in September 2012 when, after Metropolis installed its first Type 4 residential smart meter in the Ausgrid network, Ausgrid suspended the issue of Network Use of System Accounts to the Retailer because of the need for modifications to its network billing system because it automatically classifies any site with a Type 4 metering installation as ‘large’ and applies commercial network tariffs.<sup>8</sup>

Obviously this problem would already have been identified and addressed if Ausgrid had installed even just one Type 4 residential or small business smart meter within its network area.

Similarly, we are aware that no Type 4 residential or small business smart meters has been installed by, or with the authority of, SA Power Networks, ActewAGL, Essential Energy, Endeavour Energy, Energex or Ergon. In Queensland there do not appear to be any Type 5 residential and small business meters either.

Metropolis considers it ill-advised to grant Distribution business monopolies for the provision of smart meters and related services in this context.

Distribution businesses are not well placed for the complex task of designing and developing smart metering networks. No better placed than a bus company is to design and build commercial aircraft. Just because buses and planes are both used to transport people who sit in rows, doesn’t mean bus engineers can turn their hand to designing craft that fly.

Similarly, just because distribution networks transport electricity doesn’t mean that network operators are best placed to measure the flow of electricity. The distribution of electricity is concerned with electrical engineering – not the development of innovative new information technology and communications systems.

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<sup>5</sup> <http://www.ausgrid.com.au/~media/Files/About%20Us/Newsroom/Media%20releases/2009/090513EnergyAustraliaWelcomesSmartGrid.pdf>

<sup>6</sup> <http://www.ausgrid.com.au/Common/Network-projects/Network-projects-by-area/Smart-grid-projects/Smart-grid-facts.aspx>

<sup>7</sup> <http://www.smartgridsmartcity.com.au/About-Smart-Grid-Smart-City/About-our-meters.aspx>

<sup>8</sup> Email from Ausgrid dated 28 September 2012.



**What should the exit fee when a consumer upgrades its meter from one provided by the local distribution business? Is the proposed fixed 30% of the cost of a replaced meter appropriate?**

Metropolis does not consider that exit fees should be allowed unless there is a specific contractual obligation for such with the Metering Provider – that is if the Metering Provider has contracted directly with the end-use customer or with a Retailer and a conscious decision is then made to have the metering removed during the term of that contract.

Metropolis is concerned that exit fees act as an inhibitor for customer choice and serve only to protect incumbent service providers.

Why should a customer needing to upgrade to a bi-directional meter or wanting an electric vehicle metering configuration be required to pay-out a Metering Provider whose service wasn't up to the task?

All of the Type 4 smart meters Metropolis has deployed, for instance, are capable of bi-directional metering and Metropolis routinely receives requests from Retailers to remotely reprogram its meters. The cost is far lower and the convenience far greater for consumers than arranging to have meters exchanged.

Metropolis has gone to great lengths to future-proof its asset base to protect against the need to churn its meters. We expect to compete only against service providers doing the same. We expect a market where new entrants and emerging enterprises are openly encouraged. A market in which we must be vigilant, always looking for the next innovation.

What we do not expect is a retrograde market where consumers must first buy their way out of an existing service through the imposition of penalties outside a contractual obligation.

Metropolis points out to the Commission that since the introduction of full retail contestability metering has always been a contestable service.

Chapter 7 of the National Electricity Rules allows the Retailer to be the Responsible Person for a residential connection point with a Type 4 metering installation, and allows the Distributor to be the Responsible Person for a residential connection point with a Type 4, 5 or 6 metering installation.

Under Chapter 7 it is the Responsible Person who appoints the Metering Provider for a connection point. But that could be any AEMO accredited Metering Provider.

What should not have been allowed to happen – but did – is that Distributors largely locked themselves in as their own preferred supplier – to the exclusion of all other competitors –



and to the extent that regulators have allowed the entire metering asset base to be included in the regulated asset. What we have is a regulated monopoly asset base in which Distributors have been able to lock away assets that are in fact subject to competition.

Metering should have been ring-fenced from the Distribution services at the outset of the market.

But it is not too late to redress this.

The Commission's proposed model allows a line to now be drawn under the regulated metering asset base. That is, those meters included within the regulated asset base of each Distributor can remain so that as meters are removed by competitors the values continue to be written down. This alleviates the need for exit fees as the value of each asset continues to be recovered through network charges.

This fits with the proposal to unbundle metering services charge from network charges across all jurisdictions in that all the recurring operational costs associated with providing services can be unbundled from network charges, as no further costs are incurred as each connection point transitions to competitive service provision.

Again Metropolis emphasises the need to strengthen the ring-fencing guidelines so that metering services are provided through separate legal entities and that the monopoly Distribution businesses do not cross-fund, cross-subsidise or cross-promote related metering services entities.

**Does the option of a government mandating an AMI roll out within its jurisdiction act as a strong disincentive to a commercial roll out? Should the ability for these governments to mandate an AMI roll out removed from the NEL?**

Yes. Part 8A of the National Electricity Law is a very strong disincentive for commercial investment in smart metering.

The risk that a State Government may grow impatient and mandate a Distributor-led rollout of smart meters is simply too great to justify or plan investment in the large scale deployment of residential smart meters on a competitive basis.

Three additional factors play to this.

One is the precedent set by the Victorian State Government, proving that State Governments are prepared to invoke non-contestability.

The second is that ring-fencing guidelines are inadequate to prevent Distributors from granting themselves a monopoly if Part 8A were enacted.

The derogation to the National Electricity Rules that makes the Victorian Distributors the exclusive Responsible Person does not prevent them from appointing any AEMO accredited Metering Provider and Metering Data Provider able to provide smart metering solutions. But the Victorian Distribution businesses have used the opportunity to develop their own in-house metering services capabilities and to appoint themselves as Metering Provider and Metering Data Provider to the exclusion of any AEMO accredited competitor.

In fact the Victorian Distribution businesses have steadfastly refused to appoint Metropolis as Metering Provider and Metering Data Provider even for a small number of customers in circumstances where the Distributor has not been able to provide smart metering services to those customers but Metropolis has the proven capability.

It is now commonplace that Victorian consumers installing solar generation are forced to pay for a bi-directional meter upgrade that does not meet the requirements of the advanced metering rollout – simply because the Distribution businesses do not have smart meters with a bi-directional capability or do not have communications infrastructure yet deployed in the area.

Similarly, many small businesses are currently denied the opportunity to move to more attractive retail rates because they cannot get a smart meter installed on a contestable basis and have been forced to wait years under the Distributor rollout.



Yet the Distributors will not allow Metropolis to establish even the smallest toe-hold in the market to meet the needs of consumers.

Against this background it is easy to understand why many organisations capable of operating on a contestable basis do not. Many of them are in a position to supply to the Distributors. These organisations are wary that if the trend toward Distributor-led rollouts continues they will be punished – as Metropolis has been punished – by the Distributors for having dared compete against them. (Again, strengthened ring-fencing guidelines would address such concerns.)

The third factor is the Standing Council on Energy and Resources (SCER) – formerly the Ministerial Council on Energy (MCE) – statement prescribing a Distributor-led rollout:

MCE agrees that distributors are the most appropriate party to manage any obligation for an accelerated roll-out. To support this MCE agrees that residential and small customer metering and related data management services should remain the responsibility of distributors in NEM jurisdictions for at least the roll-out period. This decision is consistent with the current approach in Victoria. To provide clarity on this policy position, and to allow the AEMC to consider any related Rule changes efficiently, MCE will release a Statement of Policy Principles on this matter.<sup>9</sup>

The Statement of Policy Principles goes on to state:

To maximise the net benefits of a mandated roll-out of smart meters in a timely manner and capture the operational benefits for distribution network service providers, distribution network service providers will be legislatively obliged to roll out smart meters to some or all residential and other small customers in those jurisdictions where a mandated roll-out will take place.

A distribution network service provider who is obliged to roll out smart meters should have exclusivity over meter provision and responsibility for related metering data provision in respect of the customers covered by the mandate during the period in which the distribution network service provider must complete that mandate.<sup>10</sup>

As the Commission might appreciate such statements were disappointing for the founders and directors of Metropolis. Having invested over 4-years and millions of dollars to design and develop the necessary, and uniquely Australian, IT systems and to obtain the necessary AEMO accreditations, here was the highest level of Government telling us that we needn't have bothered.

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<sup>9</sup> [http://www.ret.gov.au/Documents/mce/\\_documents/Smart\\_Meter\\_Decision\\_Paper\\_MCE\\_13\\_June\\_200820080613153900.pdf](http://www.ret.gov.au/Documents/mce/_documents/Smart_Meter_Decision_Paper_MCE_13_June_200820080613153900.pdf)

<sup>10</sup> <http://www.aemc.gov.au/Media/docs/MCE%20Statement%20of%20Policy%20Principles-8fd446e2-e28f-4927-92a8-cd412fabd701-0.pdf>



Our largest Retailer client emailed us upon release of these statements to advise that “.....the entire contestable mass market metering segment appears to be dead in the water”.

Any opportunity for a competitive large scale rollout of residential smart meters was lost.

Needless to say such statements continue to resonate within the market. Retailers have clearly been guided toward inaction and it is no surprise that few real competitors have yet entered the market.

Part 8A has been a major policy own-goal – not only discouraging competition but failing to spur any party to action. One has to wonder why so much faith has been placed in the Distributors while no tangible result has been forthcoming for such a long period of time.

The market is at an impasse. Competitors are not willing to move forward while there is a threat of Part 8A being enacted, nor are Distributors willing to move forward unless Part 8A is enacted.

In order for competitors to have the confidence to proceed the following is required:

1. Part 8A of the National Electricity Law must be repealed;
2. The SCER must release a policy statement repudiating its earlier position and clearly stating that a competitive rollout is the desired market outcome; and
3. Ring fencing guidelines must be strengthened so that Distributors cannot use their position to favour any related metering services subsidiary or discriminate against competitors in the market.

## Appendix 1

<b>NMI:</b>	2005617617	
<b>Time zone:</b>	Central Standard Time (South Australia)	
<b>Meter Serial:</b>	20908080	
<b>Circuit:</b>	Main	
<b>Data stream:</b>	kwh Import (from grid)	kwh Export (to grid)
8/10/12 1:00	0.1620	0.0000
8/10/12 1:30	0.1580	0.0000
8/10/12 2:00	0.1210	0.0000
8/10/12 2:30	0.1600	0.0000
8/10/12 3:00	0.1600	0.0000
8/10/12 3:30	0.1210	0.0000
8/10/12 4:00	0.1570	0.0000
8/10/12 4:30	0.1640	0.0000
8/10/12 5:00	0.1250	0.0000
8/10/12 5:30	0.1470	0.0000
8/10/12 6:00	0.1570	0.0000
8/10/12 6:30	0.1340	0.0000
8/10/12 7:00	0.1380	0.0000
8/10/12 7:30	0.1540	0.0000
8/10/12 8:00	0.1450	0.0000
8/10/12 8:30	0.1860	0.0000
8/10/12 9:00	0.5700	0.0000
8/10/12 9:30	0.7130	0.0000
8/10/12 10:00	0.3270	0.0890
8/10/12 10:30	0.1800	0.2000
8/10/12 11:00	0.0510	0.2920
8/10/12 11:30	0.0000	0.5020
8/10/12 12:00	0.0000	0.4550
8/10/12 12:30	0.0120	0.3500
8/10/12 13:00	0.1120	0.4220
8/10/12 13:30	0.0200	0.3940
8/10/12 14:00	0.0040	0.4820
8/10/12 14:30	0.0020	0.3910
8/10/12 15:00	0.0000	0.4740
8/10/12 15:30	0.0440	0.3900
8/10/12 16:00	0.0080	0.3850
8/10/12 16:30	0.0000	0.5420
8/10/12 17:00	0.0000	0.5330
8/10/12 17:30	0.0000	0.5130
8/10/12 18:00	0.0000	0.3040
8/10/12 18:30	0.0000	0.1250
8/10/12 19:00	0.1000	0.0220
8/10/12 19:30	0.5570	0.0000
8/10/12 20:00	1.5010	0.0000
8/10/12 20:30	0.4240	0.0000
8/10/12 21:00	0.4510	0.0000
8/10/12 21:30	0.4420	0.0000
8/10/12 22:00	0.4180	0.0000
8/10/12 22:30	0.4710	0.0000
8/10/12 23:00	0.2290	0.0000
8/10/12 23:30	0.1540	0.0000
9/10/12 0:00	0.1430	0.0000
9/10/12 0:30	0.1690	0.0000