30 June 2006

Dr John Tamblyn
Chairman
Australian Energy Market Commission
Level 16
1 Margaret Street
Sydney NSW 2000

Type 1-4 Metering Services

Dear Dr Tamblyn,

Metropolis Metering Assets Pty Ltd (Metropolis) is a metering asset management business responsible for the installation, maintenance, repair and testing of metering assets in accordance with the National Electricity Rules.

We write to draw your attention to our business and outline the case for the maintenance of the competitive provisions of the National Electricity Rules in relation to the provision of remotely polled (Type 1-4) interval meters.

We ask that you please treat this letter with the strictest confidence and that it not be published on your web-site as it contains commercially sensitive information.

The question as to whether metering services for 'small' customers ought to be the exclusive responsibility of Australia's electricity Distribution businesses has been raised on a number of occasions.

Public and industry consultations – including the Joint Jurisdictional Review of Metrology Procedures and the ACCC review of the metering services derogations – have seen numerous detailed submissions, representing all sides of the debate, presented and considered. Each time it has been determined that Type 1-4 metering services must continue to be provided competitively.

But it is apparent that some regulators and government officials remain uncertain whether independent service providers have either the ability or resolve to rollout remotely-polled interval meters on a large scale in competition with one another.

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I can assure you that companies such as ours are *very determined* to compete for the provision of Type 1-4 meters for 'small' customers.

Fuelled by the Victorian State Government's intention to legislate a mandatory rollout of advanced meters commencing from January 2008, we are now preparing to install at least half-a-million such meters in Victoria alone.

[redacted]

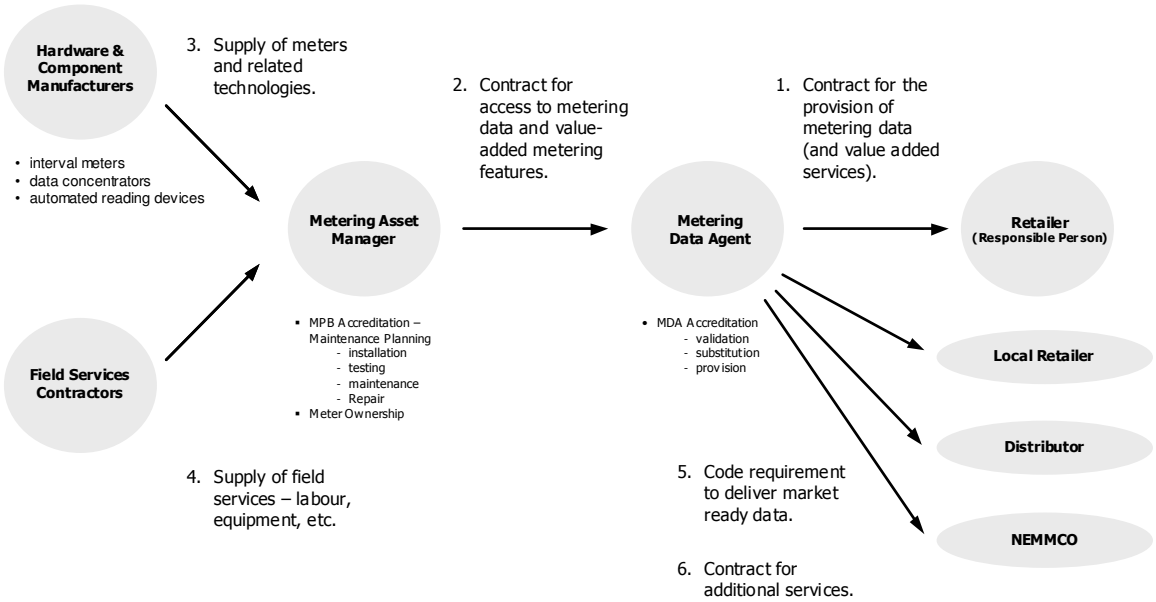
With the Council of Australian Governments (COAG) agreeing at its 10 February 2006 meeting to a conditional national rollout of "smart meters" for all consumers, we expect that over the next ten years we will have the opportunity to install over one million two-way advanced meters nationally.

Under the National Electricity Rules:

- Retailers have the right to nominate their preferred advanced metering services providers; while
- Distributors are obligated to make an offer to provide advanced meters upon written request from a Retailer.

There are no regulatory restrictions as to who can own and operate an electricity meter[1]. In fact, regulations encourage "investors who wish to consider the application of evolving technologies and processes that might be suitable for use in the national electricity market" [2].

Providers of competitive metering services form a linear supply chain to deliver metering data (and other value added services) to electricity Retailers, Distributors and NEMMCO.



[1] Except in Victoria where a customer may not own a meter - Victoria Electricity Metering Code, Clauses 2.2(a) and 2.7(a).

[2] Metrology Procedure for Type 4 Metering Installation - page 2

There are four categories of metering service provider:

1. Metering Data Agents that are accredited by NEMMCO to collect, validate, store and distribute metering data;

2. Metering Asset Managers (Metering Providers[3]) who fund – either directly or through financiers – the purchase and installation of advanced meters under instruction from the Metering Data Agent and remain responsible for the ongoing performance and reliability of those assets[4];

3. Field Services Providers that are contracted to perform installation and maintenance work in the field; and

4. Hardware Suppliers that provide advanced metering technologies to the market.

In this competitive model:

- Electricity Retailers (eg Origin Energy) are able to shop around for the best service levels and prices amongst competitive Metering Data Agents;
- Metering Data Agents, in turn, shop amongst Metering Providers for access rights to the best technical solutions on favourable commercial terms;
- Metering Providers shop amongst:
  - Hardware Suppliers for technical innovations; and
  - Field Service Providers for service levels and competitive prices.

The Metering Data Agents have the technical infrastructure to communicate with the meters. Not only to provide base data collection and validation services, but also to facilitate the two-way communications necessary for value-added services.

A progressive Metering Data Agent will have considered and prepared for the development of computer systems to allow Retailers and Distributors to easily utilise the features of advanced metering solutions. In this model, the Metering Data Agent is positioned as an application service provider.

Since it is the Metering Data Agent that must interact with meter – it is the Metering Data Agent that will determine which Metering Provider offers the best technical and commercial solution.

As such, meter ownership and management forms a competitive service line in its own right.

Metering Providers – including Distributors – must compete for the business of competitive Metering Data Agents if they desire to own and operate metering assets.

A key area of activity for the Metering Provider is to co-ordinate research and development activities. In a competitive metering services environment constant innovation is necessary to reduce costs and remain relevant in the market. It is imperative that new technologies and configurations are thoroughly tested before any decision to invest in that technology can be considered.

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[3] Category B metering providers are accredited by NEMMCO to 'provide, install and maintain' the metering installation; Category A metering providers are accredited to 'install' only.

[4] Metropolis expects to be accredited as a Metering Provider by 31 July 2006.

The Metering Provider is responsible for establishing and managing commercial relationships with metering manufacturers, remote-polling technologists, telecommunications service providers and field services providers so that Metering Data Agents are able to rely on its metering assets, to efficiently and effectively deliver metering data and value added services to market participants.

The key risk inherent in any competitive metering model is that of 'meter churn' – the situation where a meter is replaced by another competitive service provider. The option to replace a meter may be exercised at anytime, and it is the Metering Provider that bears the commercial loss if its meter is removed.

This has generally occurred when connection point responsibility has transferred from one Retailer to another, and the new Retailer does not wish to continue the relationship with the current Metering Data Agent for the site – prompting a change in meter because the subsequent Metering Data Agent cannot communicate with the existing meter.

The threat of meter churn is a necessary and vital component of a competitive metering services market. It promotes commercial and technical innovation to ensure there is no cause to remove the meter with a change of customer or market responsibilities at a site.

Nevertheless, it is obvious that financiers will not fund the purchase and installation of meters by Metropolis unless sound commercial and technical strategies are in place to mitigate churn.

The key technical requirement that facilitates a competitive market [redacted] is that metering assets, once installed, must be able to accommodate multiple changes to the responsible Metering Data Agent.

That is, Metropolis must be able to *remotely* re-assign security access and control of the meter between Metering Data Agents, and each Metering Data Agent must then be able to remotely communicate with each meter in order to read it and control its various functions.

To accommodate this, meter manufacturers must make their proprietary meter interface and command protocols readily available to the market in order to enable Metering Providers and Metering Data Agents to develop the necessary software applications to communicate with the meters over standard communications protocols (eg. TCP/IP and UDP/IP).

Metropolis does not require, nor expect, a standard industry wide protocol to be adopted in order to facilitate competition.

Metropolis has obtained access to the proprietary protocols of several leading meter manufacturers [redacted] and over the past three years has undertaken intense research and development, with the metering manufacturers and Metering Data Agents, to develop a unique *plug-and-play* architecture that allows point-to-point communications between any Metering Data Agent and any meter.

The architecture is referred to as plug-and-play because, while the technical components fall into four broad categories, the specific items used can vary and may be provided by any manufacturer or service provider:

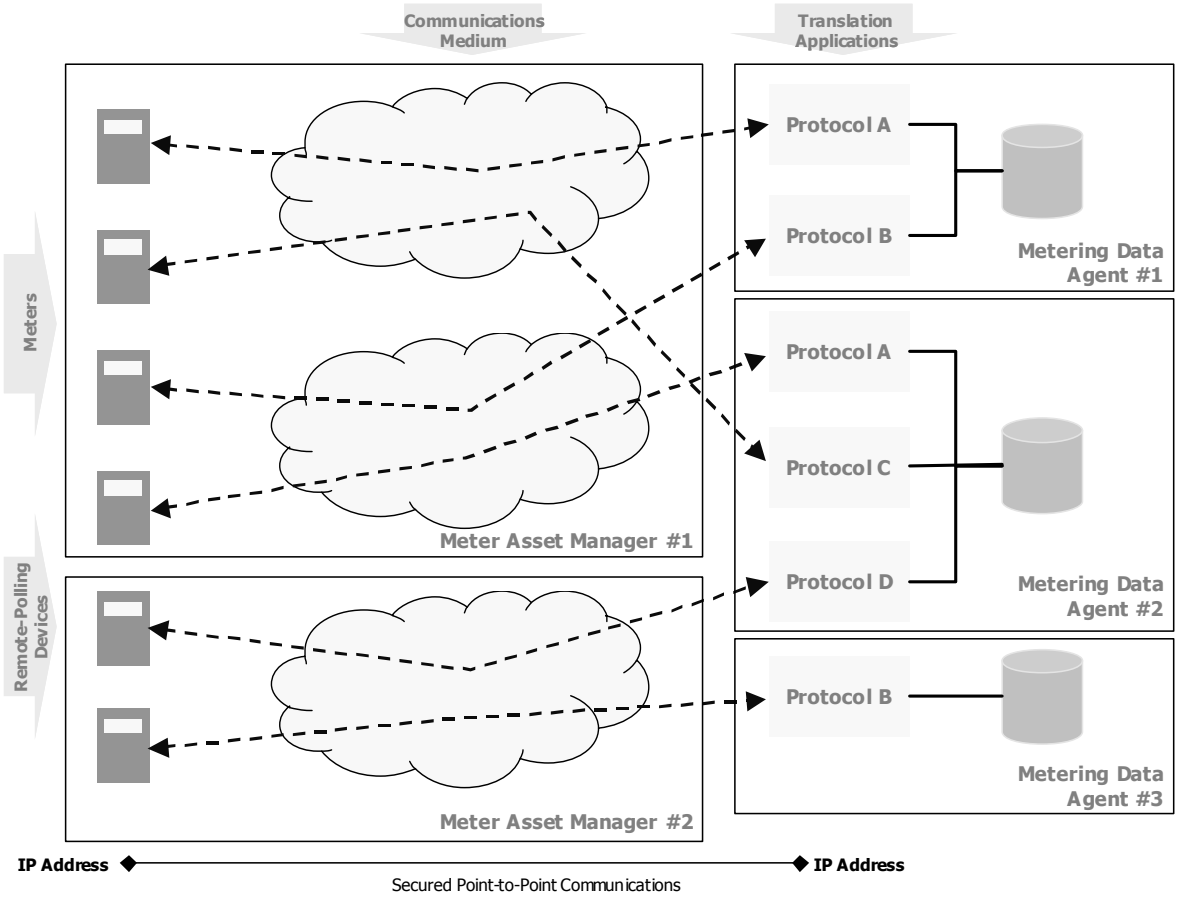
1. **Interval Meters** include single and three phase models with a range of functional configurations, including multiple datastreams, multiple circuits and remote disconnect/reconnect facilities.

2. **Communications Devices** interface with meters to extract and transmit data through a port (eg. pulse output, optical, RS232, RS422, etc.). This might be a modem, radio-frequency module, power line communications module or some other device.

   These devices tend to be designed for specific mediums and need to be selected to suit the requirements for a particular metering location.

3. Remote-polling requires a **communications medium**, such as wireless telecommunications (eg. GPRS and CDMA) and virtual private networks or directly via PSTN, GSM and the Internet. Radio-frequency and power-line communications may also be used as used as mediums between communications devices.

4. Metering Data Agents must each develop **translation applications** to communicate with meters and translate data packets as they are received. Translation applications must be developed for each proprietary protocol from which data is (or is likely to be) received via a communications medium.



Each Metering Data Agent is identified by a unique code. Presently Metropolis uses an IP Address assigned by our telecommunications provider – but it can be any code. This code is set in the meter as the destination point for any communications emitting from the meter. It is a relatively simple matter of remotely resetting that code to redirect control to another Metering Data Agent.

Meter manufacturers are fast realising that Metering Providers – such as Metropolis – will not invest in advanced metering assets that one or more Metering Data Agents knowingly cannot communicate with. Such meters only guarantee meter churn.

A fully integrated, turn-key solution is no longer required to support advanced metering.

This is a uniquely Australian innovation, and Metropolis is suitably proud to have been involved in its development.

The Essential Services Commission reports that, "there exists a robust market for the provision of metering services. Currently, there are 17 accredited metering data providers listed by NEMMCO and 20 registered category A and B metering providers. Within the market for metering services, distributors, retailers and a substantial number of third parties are all accredited to provide metering services."[5]

Our *due diligence* confirms that with this technology Metropolis and other competitive service providers can deliver advanced metering deployment and service delivery 'cheaper' than any Distributor monopoly – even with relatively low implementation densities.

We note that the proposed changes to Chapter 7 of the National Electricity Rules submitted by NEMMCO under its Metrology Harmonisation Programme preserve competition provisions relating to Type 1-4 metering installations, which allow the Retailer to be the Responsible Person and to choose their preferred Metering Provider.

We fully support the changes as proposed by NEMMCO and reject any current or future proposals to wind-back metering services competition.

As with any technical innovation and innovative business model Metropolis requires time to gain traction in the market and we look to the AEMC to provide our investors, financiers and, indeed, customers with regulatory certainty upon which we can build our business.

I will be travelling to Sydney in the next few weeks and would very much appreciate the opportunity to meet with you and discuss our plans in more detail.

In the meantime, please do not hesitate to contact me should you wish to discuss any points that have been raised.

Yours sincerely,

Marco Bogaers
Managing Director

[5] Contestability of Certain Metering Services, Final Decision Paper, 18 January 2006 – page 5