



15 February 2008

**“Without Prejudice”**

Dr John Tamblyn  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

**Victorian Government Rule Change Proposal  
(Jurisdictional Derogation)  
Advanced Metering Infrastructure Rollout**

Dear Dr Tamblyn,

This submission is made under Section 97 of the National Electricity Law, by Metropolis Metering Assets Pty Ltd (Metropolis) and Centurion Metering Technologies Pty Ltd (Centurion), in response to the Victorian State Government rule change proposal seeking a *jurisdictional derogation* establishing each local distribution company in Victoria as the exclusive *responsible person* for the rollout of advanced metering infrastructure (‘smart meters’).

This submission, including attachments, is confidential and provided on a without prejudice basis. This submission and accompanying attachments *must not be published* on the Australian Energy Market (AEMC) website or distributed in any other way, in whole or in part, without the express consent of Metropolis and Centurion.

**About Metropolis & Centurion**

Metropolis is accredited by NEMMCO as a Metering Provider for type 3 and 4 metering installations, in accordance with Chapter 7 of the National Electricity Rules, and takes full ownership of the metering installation – covering all costs associated with the procurement,

installation, maintenance and repair of both *small* (ie. residential and small business) and *large* (ie. commercial and industrial) smart meters.

Metropolis charges the *financially responsible market participant* (ie. electricity retailer) for each day that it uses its metering installation. Should the customer at the connection point switch to another electricity retailer then Metropolis commences charging that retailer instead, with no financial penalty levied against the original retailer.

Metropolis is the only NEMMCO accredited Metering Provider currently providing smart meters to electricity retailers for mass-market residential customers (ie. 'small' sites consuming less than 160 Mwh per annum) and commenced installing residential smart meters across rural and metropolitan Victoria to meet the requirements of the statewide mandate – including the minimum functional specifications – in February 2007.

In fact, Metropolis now owns and operates more residential smart meters in Victoria than all the Victorian electricity distribution businesses combined and is continuing to install residential smart meters throughout 2008 (and beyond!).

Centurion is accredited by NEMMCO as a Metering Data Agent for type 3 and 4 metering installations. One of eight accredited Metering Data Agents operating in the national electricity market, only Centurion has its own, custom designed and purpose built data collection and management systems.

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Metropolis and Centurion also operate in all other states in Australia and have recently been awarded the meter provisioning and data management services contracts for the Adelaide Solar City Project – which will see the installation of 7,000 residential smart meters over the next two years.

The Solar City Adelaide Project is the largest smart meter tender ever put out by a licensed electricity retailer and it is significant that it was won by independent service providers and not distributors (local or otherwise) because our pricing was more competitive and our services more innovative.

A key component of the Adelaide Solar City project is time-of-use and critical peak pricing trials aimed at shifting electricity consumption from peak to off-peak periods, by testing consumer responsiveness to pricing messages.

To enable such trials Origin Energy require smart meters that communicate with wireless in-home display units, which will be offered to selected consumers. In-home displays poll the smart meter every few seconds to provide an immediate source of electricity usage and pricing information.

Critical peak pricing is applied during periods of excessively high demand and the Metropolis/Centurion smart meter solution allows Origin Energy to inform customers when the critical peak price is being applied by issuing a command to the smart meter that is then relayed to the in-home display – encouraging consumers to switch off unnecessary appliances

to avoid the higher price thereby reducing the risk of enforced load shedding and higher energy prices overall.

During 2007 the Victorian Department of Primary Industries co-ordinated technology trials to test the performance of available smart metering technologies.

Metropolis and Centurion participated in the trials with Origin Energy, Red Energy and Victoria Electricity – monitoring the performance of ‘live’ residential smart meters during July & August 2007.

A number of end-to-end business processes and meter functions were also tested.

The trial results were outstanding:

- 100% of metering data was successfully collected and delivered to market within NEMMCO timeframes;
- special reads were triggered by Retailers from their desktops and results obtained in 20 seconds;
- remote disconnections were achieved in 5 seconds; and
- remote reconnections (including arming) were achieved in 6 seconds.

Retailers also successfully initiated planned outages on behalf of Distributors – demonstrating that competition delivers network benefits and functions.

Other tests proved that:

- time synchronisation is possible to within +/-5 seconds of Australian Eastern Standard Time – 15 seconds better than required by the National Electricity Rules;
- smart meters can be remotely reprogrammed to add data streams and reset load control time switch settings; and
- third party meter ownership allowed sites to transfer between the Retailers without delay or meter churn.

The trial demonstrated that versatile, reliable and cost effective smart metering solution are available to retailers through the current contestable market for meter provision and data management services.

The *Advanced Interval Meter Rollout (AIMRO) Point-to-Point GPRS Field Trials Report, July-August 2007 (Version 1.1, 10 August 2007)* is provided with and forms a part of this submission to the AEMC.

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The implication of these technologies and processes is that Metropolis can own and operate smart meters anywhere in the world, that can be easily deployed and commissioned, while Centurion can effortlessly collect and process the data from right here in Australia.

Metropolis and Centurion continue to research and develop new point-to-point communications technologies designed to reduce capital costs and operational expenditure while maintaining the bandwidth that makes GPRS such an attractive option.

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Together, Metropolis and Centurion provide electricity retailers with an innovative, responsive, low cost and highly reliable alternative to that of our competitors and we are shocked that the Victorian Government would aim to excise us from the market.

This derogation – if accepted – would deny us the opportunity of expanding the size of our residential and small business portfolio.

Additionally, the scale of a distributor monopoly across the ‘small’ market provides them with a competitive advantage in the ‘large’ market, such that we would expect them to be able to drastically undercut our pricing.

The proposed derogation places the millions-of-dollars we have invested in the Australian market at risk and sets a precedent for the other jurisdictions that will force us, and our investors, to re-evaluate our research & development initiatives and future investment plans, and consider what remedies are available to us to recover our investments and losses.

#### **Victorian State Government Proposal**

“The Victorian Government *believes* that the alternative of the retailers acting as the responsible persons will result in an inefficient rollout with potential for costly multiple duplications of infrastructure, possible stranding of infrastructure when customers transfer between retailers, uncertainty as to how or if the network benefits of AMI can be achieved and

act as an impediment to customer transfer between retailers adversely affecting the overall retail electricity market.”<sup>1</sup>

But where is the *proof* for these and other *beliefs*?

The incontrovertible *evidence* is that the exact opposite is true!

### Economies of Scale & Density

The State Government *believes* that “if the retailer was entitled to choose whether to be the responsible person for a relevant metering installation, the economies of scale and density .... will be compromised.”<sup>2</sup>

Retailer choice does not compromise economies of scale and density.

Economies of scale for both the purchase and deployment of smart metering assets can be achieved with only a small number of smart meters – such that the cost of market entry is relatively low.

Under a mandated rollout, metering hardware suppliers offer umbrella pricing to ensure the largest possible market share and production efficiencies. As such, Metropolis has the same unit cost per meter as any other competitor – regardless of overall quantity.

Further, the cost of installing a meter does not increase as geographic densities decrease. Residential rollouts in Adelaide and Melbourne prove that localised densities as low as 5% achieve very competitive installation rates.

Metropolis pays the same installation charge per meter to install a few hundred meters as it does several thousand.

Let’s assume that Metropolis undercuts a particular Distributor’s meter provisioning charges and offers a better, more reliable service for just one connection point.

Would that really diminish that particular distributor’s economies of scale and density such that charges for every other customer would need to be increased?

Of course not – such a suggestion is plainly absurd!

If just one customer can benefit from a better service delivered at a lower price, without impact to other consumers, then this establishes that the national electricity market objective is achieved through competition and not distributor exclusivity and Metropolis should not be prevented from offering its services directly to retailers.

The question then moves to how many customers might actually benefit before the distributor’s economies of scale and density are impacted? Ten customers? One hundred customers? One thousand customers? Ten thousand customers? One hundred thousand customers?

And if there is indeed a proportional increase in distributor service charges once a hypothetical tipping point is reached, then all the more opportunity for competitive service providers to undercut the distributors.

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<sup>1</sup> AMI Rule Change Proposal (Jurisdictional Derogation - Victoria), August 2007 – page 4

<sup>2</sup> Ibid. – page 8

Overall, every consumer in the state is better off.

Metropolis and Centurion have achieved economies of scale and density with only a portion of the connection points envisaged under a distributor monopoly and the Victorian State Government has failed to prove the need to monopolise the entire market.

### Network Benefits

The State Government *believes* that “there would be considerable uncertainty as to how retailers would provide the operational network benefits that are provided by AMI.”<sup>3</sup>

There is no *uncertainty* as to how or if the network benefits of AMI can be achieved. As proven during the Victorian technology trials, Metropolis and Centurion provide infrastructure that allows load shedding to be performed by either the retailer or distributor<sup>4</sup>.

Centurion also collects quality of supply data for delivery to distributors.

Recently, a Victorian residential customer was experiencing problems with a solar inverter, which continually failed to operate. The customer was able to access supply quality data from our smart meter that showed that the supply off the distributor’s network was running at 263 volts. Inverters are sensitive to high voltage and generally do not operate at above 250 volts.

The customer was able to immediately inform and verify the voltage with the distributor. A truck crew from the distributor recalibrated the transformer that afternoon and fixed the problem.

Normally, the distributor would have to investigate such a problem – taking many days and countless work-hours. But through a smart meter owned and operated by Metropolis, with data access provided by Centurion, each under contract to an electricity retailer, the distributor was immediately able to resolve the quality of supply problem.

### Communications

The State Government *believes* that “while retailers would be required to engage metering providers for the provision of AMI, it is not clear on what basis the metering providers would have access to the network assets for the provision of communications (or whether this would be an attractive approach to metering providers at all) even where this was an efficient mechanism to provide AMI.”<sup>5</sup>

The State Government also *believes* that “the loss of customers’ AMI systems to another provider under retailer responsibility may have the additional impact on top of the replacement cost of the metering installations of requiring the distributor’s AMI network to be reconfigured at a cost to all customers.”<sup>6</sup>

Noting that “the Victorian Government is technology neutral in its approach to AMI and has limited its role to defining a minimum functionality and service levels”<sup>7</sup> – Metropolis utilises point-to-point communications technologies that do not require access to the network assets for the provision of communications.

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<sup>3</sup> Ibid.

<sup>4</sup> Refer Test Case Eleven in the Advanced Interval Meter Rollout (AIMRO) Point-to-Point GPRS Field Trials Report, July-August 2007, Version 1.1

<sup>5</sup> Victorian Government Rule Change Proposal (Jurisdictional Derogation), August 2007 – page 8

<sup>6</sup> Ibid.

<sup>7</sup> Ibid. – page 24

Metropolis is unclear as to why an AMI network might need be reconfigured due to the “loss of customers’ AMI systems to another provider” as this is not necessary with our systems.

### Retail Competition

The State Government *believes* that “a mandated retailer rollout of AMI would create barriers to entry for new retailers”<sup>8</sup> and that “when a customer transfers from one retailer to another”;

- “.... the associated interruption to supply for meter changes would be an additional barrier and impediment to customer switching”<sup>9</sup>; and
- “.... retailers will be incentivised to “lock-in” customers to provide for meter cost recovery through longer term contracts reducing the potential for retail market activity”.<sup>10</sup>

A retailer rollout of AMI does not create barriers to entry for new retailers, or create impediments for customers switching. And retailers do not need to “lock-in” customers to provide for meter cost recovery through longer term contracts because *retailers do not and will not own and operate electricity meters*. “What retailers really want is access to the data that AMI provides”<sup>11</sup> rather than owning the meters themselves.

In fact, Clause 7.4.2(d) prohibits a Retailer from being the Metering Provider “for connection points in respect of which the metering data relates to its own use of energy.”

Competition invites third party meter ownership and Metering Providers, such as Metropolis, take full ownership and responsibility of each metering installation.

The only commercially prudent approach for a competitive Metering Provider to take is to disassociate the meter from the customer. It must be assumed that a customer *will switch* retailer at anytime. Third party meter owners must therefore engage all retailers in the market to mitigate instances of meter churn (asset stranding).

Metropolis pursues relationships with all existing and new retailers so that the retailer that wins a customer will continue to use Metropolis’s meter. To facilitate success in developing these relationships, Metropolis does not penalise retailers when they lose a customer to another retailer.

As such, competitive smart meter provisioning is not an *impediment* to customer transfers between retailers.

During the Victorian Technology trial, six of the sites monitored transferred between retailers. None of these transfers were intended and were prompted by the market itself.

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<sup>8</sup> Ibid. – page 8

<sup>9</sup> Ibid. – page 9

<sup>10</sup> Ibid.

<sup>11</sup> Ibid. – page 22

In all cases the transfers were completed immediately the transfer request moved from 'requested' status to 'pending' status in MSATS.

Transfer requests remain in 'requested' status during the objection period, which runs for five full business days, in Victoria, from the date the transfer is raised in MSATS by the retailer that has won the customer. Once in 'pending' status the transfer may proceed.

With manually read meters, transfers remain 'pending' until the next scheduled read. Once the read is collected the metering data provider submits the date of the read to MSATS as the date of transfer.

In the case of smart meters, where data is collected daily, the transfer date is set in MSATS as the date the request moved from 'requested' status to 'pending' status – so that the transfer occurs immediately. This is the process Centurion applies *in all circumstances* – even where the retailer acquiring the customer does not yet have a service provision contract with either Metropolis or Centurion.

In fact, it is in the interests of Metropolis and Centurion that customers do switch, particularly to new retail entrants, as this offers the opportunity to engage that retailer in a commercial relationship.

If the meter is a barrier in any way – technically, functionally or commercially – then this is only to Metropolis's own detriment as the offending meter will be churned.

The overwhelming evidence is that the installed meter asset base is just as stable under competition as under monopoly conditions. Thus far Metropolis has not had one meter stranded due to a customer switching to a new retailer.

Given that a new Metering Provider will not be engaged with each transfer – there will be no associated interruption to supply.

### Small Retailers

The State Government *believes* that “a mandated retailer rollout of AMI ....may ....prejudice existing small retailers.”<sup>12</sup>

Quite the contrary – it is the State Government's proposed Exit Fee (refer page 23 of this submission) that *prejudices smaller retailers* under the proposed derogation.

Retailers that choose to allow distributors to deploy less innovative and less cost effective metering solutions, under an Exit Fee arrangement, will lock other retailers into those solutions, as they win customers, because it is they that must pay the Exit Fee.

This clearly discriminates against smaller retailers who will be less competitive because they either may not be able to market specialist products and services to win new customers, or those services will be more expensive due to the need to pay the Exit Fee.

Retailers with larger customer bases can effectively dumb-down the product and service offerings of their competitors.

What an extraordinary model the State Government has proposed!

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<sup>12</sup> Victorian Government Rule Change Proposal (Jurisdictional Derogation), August 2007 – page 8



In our experience smaller retailers have better back-end systems and processes than their larger counterparts, which allows them to be far more adaptive to change and gives them a distinct competitive advantage under a retailer mandate.

Metropolis continues to deploy residential smart meters in Victoria on behalf of several small retailers and has developed a competitive rollout process with them that allows us to seamlessly update their backend systems using existing processes via each retailer's FTP link with MSATS.

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### Natural Monopoly

The State Government *believes* that “multiple sets of (geographically overlapping) meter communication infrastructure would likely exist if retailers were mandated to rollout AMI or were entitled to choose whether to be the responsible person for a relevant metering installation.”<sup>13</sup>

Electricity distribution businesses do not hold a “natural monopoly” over the provisioning of meters or data management services pertaining to those meters.

An organisation is said to hold a “natural monopoly” when there are natural barriers to new entrants and are most often associated with large, infrastructure based industries such as rail networks, tollways, gas pipelines, telecommunications, water services and – of course – electricity distribution.

A new entrant would, in the first instance, be required to duplicate the required infrastructure in order to compete against an incumbent.

*Infrastructure duplication* is a key characteristic that defines a “natural monopoly” because it is either physically impossible to duplicate infrastructure (for example, it is not possible to build a second tollway, railway or subway servicing the same precincts as the necessary land is not available) or, even if it is possible to deploy competing infrastructure, the cost of doing so maybe so high as to be uneconomic – particularly given that 100% market share is often required to justify the investment.

But the provisioning of smart meters and data management services is not encumbered by these factors.

Competition amongst Metering Providers does not *duplicate* the deployment of smart meters and related infrastructure – it only results in the *replacement* of overpriced and under-performing smart meters.

Similarly, there are no physical impediments preventing competitive activity amongst Metering Providers, who can each replace smart meters relatively easily.

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<sup>13</sup> Ibid.

Most importantly, infrastructure investment in smart metering is not in the same category as a railway network or tollway because rather than investment in a large, single asset, the investment is in millions of small, widely distributed assets.

Policy makers and regulators are sometimes required to regulate “natural monopolies” – usually to enable third-party “access rights” to encourage upstream and downstream competition and investment.

But it is inherently illogical to create a monopoly, through regulation, where one does not exist naturally – unless the intent is to introduce other social goals.

The National Competition Policy Review (commonly referred to as the “Hilmer Report”) notes:

The promotion of competition will often be consistent with a range of other social goals, including the empowerment of consumers. However, there may be situations where competition, although consistent with efficiency objectives and in the interests of the community as a whole, is regarded as inconsistent with some other social objectives. For example, governments may wish to confer special benefits on a particular group for equity or other reasons.

In some cases competition in a particular activity may be restricted to allow a public monopoly to pursue these wider objectives. Thus, for example, public monopolies in areas such as electricity, water and ports have often been directed to provide goods or services to particular groups at prices below the full costs of production, with the resulting deficits often funded through higher charges applied to other users.<sup>14</sup>

However, it is not a provision of the national electricity market objective to promote “social goals”.

Nor, it is to be noted, is the derogation proposed because metering services are to be delivered “below the full costs of production”.

Competition among Metering Providers does not result in multiple sets of (geographically overlapping) meter communication infrastructure.

There is no *duplication* of infrastructure under competition. Meter replacement does not constitute duplication. Nor does the development of new and improved communications, data collection and management systems, by new and intending market entrants, constitute duplication.

Ongoing research, development and innovation are normal commercial activities that drive service quality improvements and business process efficiencies that lead to lower prices. These activities need to be encouraged not dismissed as undesirable duplications.

Noting again that “the Victorian Government is technology neutral in its approach to AMI and has limited its role to defining a minimum functionality and service levels”<sup>15</sup> – Metropolis utilises point-to-point communications. If Metropolis’s meters were to be churned, each communications point would be replaced, not *duplicated*.

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<sup>14</sup> National Competition Policy Review, Prof Frederick G Hilmer, et al., August 1993 – page 5

<sup>15</sup> Victorian Government Rule Change Proposal (Jurisdictional Derogation), August 2007 – page 24

### Cost Recovery

The State Government *believes* that it's "objectives in relation to an orderly cost recovery approach would be significantly more complex to achieve where there is retailer involvement in the rollout"<sup>16</sup> and that "there would be an accelerated and/or uncertain timeframe for the recovery of costs by retailers given their shorter term relationship with customers resulting in relatively higher cost to customers or a request for (contractual) penalties if customers' switch prematurely."<sup>17</sup>

As a competitive Metering Provider, Metropolis does not expect to achieve "orderly cost recovery" through regulation, rather it expects to make a return on its investment by offering the best services at the lowest possible price in order to entice electricity retailers to contract its services across as many connection points as possible.

In disassociating the retailer's relationship with each customer, and its own relationship with retailers, third party meter owners, such as Metropolis, can price services on the basis that meters will remain in situ for ten years or more.

Moreover, retailers do not expect an orderly recovery of costs given their shorter term relationship with customers because *retailers do not and will not own and operate electricity meters*.

### Asset Stranding

The State Government *believes* that "when a customer transfers from one retailer to another .... the metering installation (will be) inefficiently ....removed and another installed ....when a new metering provider is engaged" and that .... meter churn will increase the cost of transfer and so impact on the effectiveness of the (primary) retail electricity market and, indirectly, the wholesale market".<sup>18</sup>

There is no *stranding* of infrastructure. Evidence from overseas and locally is that contractual provisions with retailers protect meters from 'churn' where service levels and performance standards are effectively achieved and maintained.

Nor is it reasonable to assume that a new Metering Provider will be engaged with each transfer such that the cost of transfer will be increased.

Meter churn (asset stranding) is characteristic only where there is vertical integration between retail and distribution businesses – due to internal directives that require the retail business to purchase contestable metering services only from within the group.

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However, this nexus is now broken in South Australia, Victoria and (most recently) Queensland where the electricity retail businesses have been separately sold off – such that there is no common ownership between any retail and distribution businesses.

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<sup>16</sup> Ibid. – page 8

<sup>17</sup> Ibid. – page 9

<sup>18</sup> Ibid. – page 9

Retailers are now free to seek out the best service providers in terms of price, quality and reliability.

Interestingly, the propensity to churn meters in these markets has rapidly diminished.

That is not to say that meters are not churned; but this is not an automatic response. Retailers usually have good reason to churn a meter – high, uncompetitive pricing, poor quality of service and unreliability being common reasons.

However, the most likely reason that a smart meter is churned today is due to a lack of *interoperability*.

*Interoperability* describes the situation where technical components in an end-to-end smart metering architecture are readily interchangeable such that retailers do not need to be locked in to a single service provider relationship, or metering service providers locked into a single supplier relationship, and new innovations can be readily introduced.

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But it is *interoperability* between the back-end systems of Metering Data Agents and the deployed smart meters of the different Metering Providers that is critical to mitigate meter churn.

Over the past 10 years many distributors have deployed smart meters configured only for the back-end systems of a single Metering Data Agent and most commonly using an outmoded and inefficient communications medium – GSM – that requires back-end systems to initiate contact with each meter.

As such, electricity retailers have had no option but to churn meters where they have wanted to utilise the services of more competitively priced Metering Data Agents – such as Centurion.

These meters are now being replaced with interoperable meters so that retailers can change Metering Data Agent without the need to change Metering Provider.

Meter churn or – to be more specific – *the risk of meter churn* is therefore a vital aspect of a competitive market as without it there is no drive toward innovation.

When contracted by an electricity Retailer to deploy a smart meter, Metropolis's primary objective is to avoid having that meter churned for ten years.

For this reason, Metropolis only purchases and deploys smart meters from manufacturers that make their communications and command (interface) protocols readily accessible to accredited Metering Data Agents.

So when a customer chooses to transfer from one Retailer to another, and the new Retailer chooses to appoint a different Metering Data Agent, Metropolis only has to re-assign security access and control over the meter to the new Metering Data Agent and the transfer is completed immediately the MSATS objection period has passed.

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This places the onus on Metering Data Agents – such as Centurion – to enhance the range of meters with which they can communicate in order to remain competitive.

Centurion has worked closely with several metering manufacturers so that its systems can communicate with a number of meter makes and models using several communications mediums. Importantly, Centurion also has the capability to add new makes and models at anytime.

This allows Retailers to appoint Centurion as Metering Data Agent without the need to churn an installed ‘smart meter’ and is a real-world example of how competition – manifested in the form of meter churn ‘risk’ – has served as an impetus for *efficient investment* in productive efficiencies, allocative efficiencies and dynamic efficiencies, as described in the Hilmer Report – forcing the market down the path toward full *interoperability*:

Efficiency is a fundamental objective of competition policy because of the role it plays in enhancing community welfare. There are three components of economic efficiency:

- Technical or productive efficiency, which is achieved where individual firms produce the goods and services that they offer to consumers at least cost. Competition can enhance technical efficiency by, for example, stimulating improvements in managerial performance, work practices, and the use of material inputs.
- Allocative efficiency is achieved where resources used to produce a set of goods or services are allocated to their highest valued uses (ie, those that provide the greatest benefit relative to costs). Competition tends to increase allocative efficiency, because firms that can use particular resources more productively can afford to bid those resources away from firms that cannot achieve the same level of returns.
- Dynamic efficiency reflects the need for industries to make timely changes to technology and products in response to changes in consumer tastes and in productive opportunities. Competition in markets for goods and services provides incentives to undertake research and development, effect innovation in product design, reform management structures and strategies and create new products and production processes.

Economic efficiency plays a vital role in enhancing community welfare because it increases the productive base of the economy, providing higher returns to producers in aggregate, and higher real wages. Economic efficiency also helps ensure that consumers are offered, over time, new and better products and existing products at lower cost. Because it spurs innovation and invention, competition helps create new jobs and new industries.<sup>19</sup>

The natural extension of this logic is not that Metering Data Agents must be proficient in every make and model that is deployed. Rather, Metering Data Agents might choose to specialise in specific meters. Although, in the case of Centurion, we will continue to develop capabilities across the widest possible selection of meter makes and models and functions to ensure the largest possible share of the market.

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<sup>19</sup> National Competition Policy Review, Prof Frederick G Hilmer, et al., August 1993 – pages 3-4

The benefit for Retailers has been higher service levels and lower prices.

Thus far, Metropolis has not had a single meter churn where customers have transferred between retailers subsequent to a meter being installed and secure in the knowledge that its meters are not prone to churn, Metropolis offers the lowest priced meter provisioning services in the market today.

### 'Churn' Regulation

The State Government *believes* that “to attempt to manage the above churn issues, it is likely that new regulatory arrangements will be necessary that require the existing metering provider to provide metering provision services to the new responsible person under reasonable terms and conditions (The AMI metering provider in this case under a retailer roll out may be able to exercise some market power given the alternative of replacing the metering installation and relevant metering communications, hence some form of regulation or price monitoring may be required.)”<sup>20</sup>

Regulatory arrangements that require the existing metering provider to provide metering provision services to the new responsible person under reasonable terms and conditions *will not* be necessary.

Retailers and competitive Metering Providers are very capable of managing our churn issues.

Competitive Metering Providers *will not* be able to exercise market power given the alternative of replacing the metering installation and relevant metering communications.

It is retailers that have the natural advantage as they only need to deliberately churn a small number of meters to affect the profitability of the entire Metering Provider's portfolio for that year.

Metering Providers are more vulnerable to churn than the retailers are to a short delay in customers switching (noting that all retailers today experience transfer delays of between 4-10 weeks).

### Lessons from Overseas Experience with AMI

As noted by the Victorian State Government, “the structural arrangements in other jurisdictions (around the world) often differ from that in Victoria and Australia generally and much of the electricity industry remains more strongly vertically integrated than in Australia. Hence many of the AMI rollouts are the clear responsibility of the local distributor, e.g., Italy (ENEL) and Ontario.”<sup>21</sup>

At the other end of the spectrum are jurisdictions where there is no longer any vertical integration at all. Electricity retail and distribution businesses are totally separate in terms of structure and ownership. These markets – which include Australia, New Zealand and the United Kingdom – have matured through a number of phases from state ownership, to disaggregation, to total privatisation and, most recently, to *vertical disaggregation*.

Markets that are “strongly vertically integrated” – such as the United States and the Netherlands – do not bear comparison with markets that are no longer vertically integrated

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<sup>20</sup> Ibid. – page 9

<sup>21</sup> AMI Rule Change Proposal (Jurisdictional Derogation - Victoria), August 2007 – page 22

and the Victorian State Government's implication that foreign Governments have reversed competition policy in respect to the provision of metering services, to support its contention that the same should apply in Victoria, is unfounded.

The overwhelming evidence is that 'exclusive' rollouts of AMI are characteristic only of vertically integrated markets, while fully competitive markets rely on competitive processes to implement smart meters.

Australia clearly falls in the later category – not the former.

#### United States

The *Electricity Consumers' Power to Choose Act* was introduced in 1996 requiring that state utilities submit a plan, allowing consumers to choose their retailer, to the Federal Energy Regulatory Commission (FERC) by the end of 2000. Seventeen states (including the District of Columbia) introduced full retail competition, and two states allow retail access for large customers only.

But the energy crisis that struck the western United States in 2000 has largely stymied the process. The competition reform process is still in its early stages in the United States and each state has implemented its own unique set of rules and regulations.

California suspended its retail program in 2001 and five other states that passed restructuring legislation have indefinitely postponed implementation or have repealed the legislation altogether. Twenty-six states are no longer considering competitive restructure.<sup>22</sup>

Only a few jurisdictions have implemented competitive metering.

In 2003, Virginia implemented "customer ownership of meters by large industrial and large commercial customers effective January 1, 2004", but subsequently issued an order "that it was premature to implement additional elements of competitive metering."<sup>23</sup>

Similarly, New York State introduced metering competition to allow large customers to procure meters and metering services, such as meter installation and meter reading, directly from competitive service providers. Utilities were directed to unbundle metering prices and provide a back-out credit to participating customers.

The United States largely consists of vertically integrated utilities, even in states with a moderate level of retailer competition, that have not regulated to allow any form of metering services competition at the mass market level.

It is noteworthy that no vertically integrated businesses in the United States have moved to introduce smart metering of their own accord.

#### Netherlands

The State owned electricity utility, SEP (Samenwerkende Energie Producenten), was disaggregated in 1998 into ten vertically integrated, government owned utilities (such as

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<sup>22</sup> 2005 Performance Review of Electricity Power Markets – Kenneth Rose & Karl Meeusen, 23 August 2005 – page 2

<sup>23</sup> Status Of Retail Access And Competition in The Commonwealth (of Virginia) - report to the Governor and to the Commission on Electric Utility Restructuring – pages 20-21

DELTA Netwerkbetrijf, ENECO NetBeheer and Essent Netwerk) and have remained that way ever since.

Full retail contestability for residential customers only commenced from 1 January 2004, which has seen the introduction of new retailers, but the main retail businesses remain vertically integrated.

Like the United States, competitive metering services are not directed at retailers but at consumers directly.

Regulations allow mass-market and commercial users to choose their metering services provider – a relatively unattractive proposition for residential customers and only a small market at the commercial end. Not surprisingly, there has been little overall traction.

In December 2007 we met with the Directorate-General for Energy, of the Dutch Ministry of Economic Affairs who acknowledges that economic separation is essential for effective competition, noting that the Dutch Government has set a timetable for separation between the retail and distribution arms of all ten state owned utilities no later than 1 January 2011.

The Dutch Government has now decided to mandate advanced metering ahead of this further step toward privatisation and has reversed its policy of allowing consumers to choose their own metering service providers – providing compensation to any consumers who are adversely affected.

Of note is that while the Distribution businesses will be charged with rolling out the smart meters on an exclusive basis, they may not compete for the provision of data management services. The Dutch Government wants competition among data management services providers, which will be appointed by the Retailers.

However, as we have learned, this model is not without its drawbacks.

Essent, which has customers all over Holland, advised us that while Dutch distributors have had difficulty with powerline carrier and are largely favouring GPRS, the proposed distributor architecture has compromised the bandwidth.

Noting that the size of a message that can be sent to an in-home display via the meter is limited, Essent retail is now seriously considering putting a GPRS modem in the display as so that they can communicate with it directly; highlighting that a Distributor monopoly for the deployment and ownership of smart metering assets only pushes costs further up the supply chain.

A logical further step for the Dutch Government to consider is economic separation between the metering asset managers and distribution arms of the ten utilities to ensure that there is an effective level of competition.

#### United Kingdom

The metering services market in the United Kingdom is fully competitive both for manually read meters and smart meters (including gas and electricity).



(Electricity retailers)<sup>24</sup> are already rolling out advanced meters in the business sector and are considering the business case for smart meters in the domestic market. The evidence coming from the trials of smart meters and real-time displays ...will underpin future decisions on smart meter deployment.

(The expectation of the Department of Trade and Industry) is that, within the next 10 years, all domestic energy customers will have smart meters with visual displays of real-time information that allow communication between the meter, the energy supplier and the customer.

The display will provide customers with readily accessible information about their energy usage. The Government will work with suppliers, Ofgem and other interested parties in these developments, including through our Energy Demand Research Project. We expect suppliers to roll out smart meters when it is cost effective to do so and within the timescales we have set.

We welcome the progress being made by (electricity retailers), with the support of Ofgem, to remove barriers to the roll out of smart metering. (Electricity retailers) and manufacturers are also examining the scope for developing communication systems that can be shared between electricity and gas meters, as well as the scope for commercial arrangements to share both communications systems and data between companies.<sup>25</sup>

From our knowledge of the market in the United Kingdom we cannot draw the conclusion that the “desire for an AMI rollout, which currently falls short of a mandate, is being stalled because of the policy for the assignment of metering responsibility.”<sup>26</sup>

It is only that the economic justification for the deployment of smart meters does not currently benefit all consumer tranches.

It is also to be noted that the market in the United Kingdom settles by net-profile. As described by the International Energy Agency:

The United Kingdom retail market model assumes designated load profiles for residential customers which are aggregated according to demand at a designated Grid Supply Point (GSP). A supplier (ie. retailer) is allocated a demand profile which is effectively the net of all meter-read volume, allocated according to a designated profile, plus all half hourly metered customers and unmetered loads (eg. street lighting). These supplier totals are netted for the Grid Supply Point, profiled according to the allocated usage profiles, with any differences effectively being distributed amongst common Grid Supply Point suppliers according to demand share.<sup>27</sup>

The International Energy Agency notes “that under these conditions there is no incentive for (an electricity retailer) to encourage a profiled customer to shift their consumption using price signalling .....(as) any load-shifting and subsequent economic gains ...will be distributed amongst all common Grid Point Suppliers.”<sup>28</sup>

Accordingly, there is no incentive for half-hour interval data and therefore no demand from electricity retailers for interval meters – remotely-pollled or otherwise.

### New Zealand

In April 1987 the New Zealand Government established the Electricity Corporation of New Zealand (ECNZ) to own and operate the Ministry of Energy’s generation and transmission assets, which had previously been the responsibility of 61 electricity supply authorities.

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<sup>24</sup> Retailers are referred to as “suppliers” in the United Kingdom

<sup>25</sup> Meeting the Energy Challenge A White Paper on Energy, Department of Trade and Industry (United Kingdom), May 2007 – page 64

<sup>26</sup> AMI Rule Change Proposal (Jurisdictional Derogation - Victoria), August 2007 – page 23

<sup>27</sup> The Power to Choose, Demand Response in Liberalised Electricity Markets – International Energy Agency, 2003 – page 94

<sup>28</sup> Ibid.

Key reform came with the *Electricity Industry Reform Act (1998)*, which prevents vertical integration, in the form of either investment or ownership. A generation company cannot own or have an interest in a distribution company and a distribution company cannot retail electricity or deal in electricity hedges.

Five major retail businesses were established in New Zealand as a result – Meridian Energy Limited, Contact Energy Limited, Genesis Power Limited, Mighty River Power Limited (retailing as Mercury Energy) and TrustPower Limited – with several smaller retailers now in the market also.

In terms of smart metering, the future direction of competitive electricity markets is now exemplified by New Zealand – where retailers are actively rolling out smart meters in the tens to hundreds of thousands.

Confidential information omitted in accordance with  
Section 108 of the National Electricity (South Australia) Act, 1996

It is to be noted that there is no mandate in New Zealand. The smart meter rollout is a natural progression from full retail contestability and follows the lead of a single retailer that decided to rollout smart meters to its customers. Other retailers have been forced to respond to remain competitive.

Yet, amazingly, “the Victorian Government is not aware of any market-wide rollout of AMI that has come about by market forces alone.”<sup>29</sup>

### **Global Opportunities**

By spearheading the development of competitive, non-vertically integrated markets, ahead of the rest of the world, Australia has had the opportunity to develop the necessary technical and commercial innovations in smart metering to enable our competitive service providers to immediately enter, compete within and conquer emerging foreign markets.

Imagine the export earning opportunities for Australia – and Victoria in particular – which has been at the forefront of competitive market development.

The situation that is now enveloping New Zealand could have (should have) occurred here in Victoria in 2006. It almost did!

Our paper *Competitive Meter Ownership – Opportunities, Risks & Rewards*, presented at the *Measurements & Metering Innovation Conference* in May 2005 is provided with and forms a part of this submission to the AEMC.

But the natural evolution of the Australian market has been hindered by the regulatory uncertainty brought about by constant reviews of policy and regulation concerning the *responsibility* for determining who should appoint metering service providers.

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<sup>29</sup> AMI Rule Change Proposal (Jurisdictional Derogation - Victoria), August 2007 – page 22

During 2005 and into 2006 Metropolis & Centurion submitted pricing proposals to Victorian electricity retail businesses offering to rollout smart meters, as an alternative to the distributors rolling out manually read interval meters, matching the distributors' price points that had been approved by the Essential Services Commission for the 2006-2010 regulatory price control period to facilitate the mandated rollout of interval meters.

The only reason that Metropolis has not rolled out smart meters in significantly larger numbers than it has to date is not because of a lack of retailer support but because of investment banks with the capital resources necessary to fund larger scale meter rollouts are concerned about the regulatory merry-go-round competitors like Metropolis have found themselves on.

From the Victorian Essential Services Commission's consultation for the rollout of manually read interval meters, through the Joint Jurisdictional Review of the Metrology Procedures, the extension of the Victorian derogations for manually read metering services and finally to this consultation – the question has been raised, discussed, debated and decided. And each time it has been decided – in favour of competition – it has been raised again – and again – and again.

This uncertainty has persisted for five years and – not surprisingly – has discouraged new market entrants from taking to the field and investors from supporting competitive initiatives.

Compare this situation to that in the United Kingdom and New Zealand where the Governments have been unequivocal in their support of allowing retailers to source competitive meter provisioning and data management services.

Now, competitive service providers from those markets, [REDACTED] are entering Australia – while we are being distracted by the fight just to keep the local market open and missing our opportunity to extend internationally.

Vertically integrated, monopoly businesses do not compete in global markets. Businesses that must compete in their own markets to survive do!

Any opportunity Australia has to compete in New Zealand, the United Kingdom and perhaps even the Netherlands, is being squandered by a rule change that undermines the very thing that gives Australia its competitive advantage in global markets – its own competitive market structure.

This can only be to the detriment of Australian electricity consumers, who will miss out on world leading innovations and lower overall charges.

### **National Electricity Market Objective**

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.

Section 88(1) of the National Electricity Law states that “the AEMC may only make a Rule if it is satisfied that the Rule will or is likely to contribute to the achievement of the national electricity market objective.”

### Metering Services are Electricity Services

The National Electricity Law defines “electricity services” as:

... services that are necessary or incidental to the supply of electricity to consumers of electricity, including—

- (a) the generation of electricity;
- (b) services provided by means of, or in connection with, a transmission system or distribution system;
- (c) the sale of electricity;

As the proposed jurisdictional derogation pertains to the provisioning of smart meters and related data management services for mass-market consumers, using less than 160 Mwh of electricity per annum, and not for generation assets, electricity services do not include the generation of electricity in this instance.

With respect to point (b), electricity meters do not form part of the “distribution system”.

The *Electricity Safety (Network Assets) Regulations 1999 (Victoria)* define a “network asset” as “any asset that is owned or operated by a network operator for the purposes of generating, transmitting, distributing or supplying electricity”. These regulations fall under the *Electricity Safety Act 1998 (Victoria)*, which defines a “network operator” as the person who owns the “upstream network”, and the “upstream network” as that “part of a supply network that is upstream of the point of supply” - being “in the case of an underground line the point at which that line crosses the boundary of the land; and in the case of an overhead line the first point of connection of that line on the land, being either ....the first pole on the land carrying that line; or if the line is connected directly to premises on the land, that connection to the premises.”

Electricity meters are downstream of the “point of supply” and are therefore not considered to be “network assets” under the Victorian *Electricity Safety (Network Assets) Regulations 1999* and *Electricity Safety Act 1998*.

It is noteworthy that Distributors themselves draw the distinction between distribution and metering services.

In a submission to IPART in 2003, EnergyAustralia stated:

The services provided by a distribution system ...are associated with the conveyance of electricity through the distribution system (and) include entry services, distribution network use of system services, exit services and network services which are provided by part of a distribution system, (covering) the physical processes which result in electrical energy passing or being conveyed through a distribution system, from entry points to exit points.

By contrast, the definition of ‘metering’ focuses on the actual process of recording or measuring the results of the wholly separate physical processes of production (by a generator at one end of a network) and consumption (by consumers at the other end of the network) ...(such that) the provision of a meter is not an essential part of the network service.

This distinction is reinforced by the (National Electricity Rule’s) separate regulation of distribution (under Chapters 5 and 6) and metering (under Chapter 7). For (IPART) to purport to regulate metering under its distribution regulation powers under Chapter 6, with the potential for this to confuse or be inconsistent with the comprehensive regulation already provided for under Chapter 7, would be

inconsistent with the intent of the (National Electricity Rules). The Tribunal has the role in metering as the metrology co-ordinator (under Chapter 7) but not as the economic regulator (under Chapter 6).<sup>30</sup>

Therefore the provision of electricity metering and data management services cannot be considered “services provided by means of, or in connection with, a ..... distribution system”. The provision of metering assets is quite separate from the provision of distribution assets.

As metering data derived from electricity meters is used:

- by NEMMCO, to settle the wholesale purchase of electricity between retailers and generators, and
- by electricity retailers to facilitate the on-sale of that electricity to consumers by matching customers to appropriate tariffs, providing quotes, billing customers, responding to customer queries and assisting consumers to better manage their energy usage;

the provisioning of smart meters and data management services fall within the definition of *electricity services* in the context, and only in the context, that those services are *necessary* to achieve *the sale of electricity* by retailers to consumers; specifically those using less than 160 Mwh of electricity per annum.

#### Regulated Pricing of Metering Services

In July 2004, the Victorian Essential Services Commission released its Final Decision, mandating an accelerated rollout of up to one million interval meters by 2012 with a further 1.3 million meters replaced on a new for old basis over an extended period<sup>31</sup> and in October 2005 released its final decision regarding metering price controls to apply to the Victorian electricity distribution businesses from 1 January 2006 to 31 December 2010.

To facilitate the rollout, the Essential Services Commission approved a charging regime designed “to avoid a price shock in 2011”<sup>32</sup> by increasing the prescribed metering services charges each year of the 2006-2010 regulatory period by applying the following formula<sup>33</sup>:

$$\frac{(1 + CPI) \times (1 - X) \times (1 + M)}{(1 + M \text{ previous year})}$$

The X factors to apply in calendar years 2007, 2008, 2009 and 2010 are set as<sup>34</sup>:

AGL Electricity	-0.20
CitiPower	-0.20
PowerCor Australia	-0.20
SP AusNet	-0.20
United Energy Distribution	-0.20

<sup>30</sup> Review of Prescribed and Excluded Distribution Services, 10 April 2003

<sup>31</sup> Mandatory Rollout of Interval Meters for Electricity Customers, Final Decision, July 2004

<sup>32</sup> Electricity Distribution Price Review 2006-10, Final Decision, Volume 1 – page 573

<sup>33</sup> A detailed explanation of this formula is contained in pages 52-55 of the Electricity Distribution Price Review 2006-10, Final Decision, Volume 2.

<sup>34</sup> Electricity Distribution Price Review 2006-10, Final Decision, Volume 2 – page 577

The double negatives (ie. 1 - - 0.20) are intended by the Essential Services Commission to equate to a positive (ie. 1 + 0.20). That is, a 20% increase in this component of the formula.

Assuming annual CPI of 3%, this formula results in a general annual price increase of 23.6% as follows:

$$\frac{(1 + 0.03) \times (1 + 0.20) \times (1 + 0)}{(1 + 0)} = \frac{(1.03) \times (1.20) \times (1)}{(1)} = \frac{1.236}{1}$$

The distributors' *prescribed services charges*, per connection point, approved by the Essential Services Commission for the 2006-2010 period are:

		2006 (Actual)	2007 (Actual)	2008 (Actual)	2009 (Estimated)	2010 (Estimated)
Alinta	Quarterly Read					
	Single Phase Non Off-Peak	\$12.87	\$17.55	\$21.45	\$26.51	\$32.77
	Single Phase Off-Peak	\$29.96	\$40.77	\$49.84	\$61.60	\$76.14
	Three Phase Direct Connected	\$42.52	\$57.83	\$70.70	\$87.39	\$108.01
	Monthly Read					
	Three Phase Direct Connected	\$64.62	\$87.95	\$107.51	\$132.88	\$164.24
Citipower	Three Phase CT Connected	\$33.78	\$46.04	\$56.26	\$69.54	\$85.95
	Quarterly Read					
	Single Phase Non Off-Peak	\$15.20	\$20.25	\$24.73	\$30.57	\$37.78
	Single Phase Off-Peak	\$19.00	\$25.63	\$31.32	\$38.71	\$47.85
	Three Phase Direct Connected	\$38.28	\$50.56	\$61.82	\$76.41	\$94.44
	Monthly Read					
PowerCor	Three Phase Direct Connected	\$60.51	\$77.20	\$94.37	\$116.64	\$144.17
	Three Phase CT Connected	\$74.34	\$94.94	\$116.08	\$143.47	\$177.33
	Quarterly Read					
	Single Phase Non Off-Peak	\$17.20	\$22.81	\$27.79	\$34.35	\$42.45
	Single Phase Off-Peak	\$23.53	\$31.43	\$38.29	\$47.33	\$58.50
	Three Phase Direct Connected	\$44.90	\$59.02	\$71.92	\$88.89	\$109.87
PowerCor	Monthly Read					
	Three Phase Direct Connected	\$71.03	\$90.56	\$110.36	\$136.40	\$168.60
	Three Phase CT Connected	\$90.56	\$115.49	\$140.75	\$173.97	\$215.02

		2006 (Actual)	2007 (Actual)	2008 (Actual)	2009 (Estimated)	2010 (Estimated)
SP Ausnet	Quarterly Read					
	Single Phase Non Off-Peak	\$17.49	\$23.47	\$28.69	\$35.46	\$43.83
	Single Phase Off-Peak	\$21.19	\$28.00	\$34.22	\$42.30	\$52.28
	Three Phase Direct Connected	\$51.49	\$68.74	\$84.03	\$103.86	\$128.37
	Monthly Read					
	Three Phase Direct Connected	\$78.74	\$106.57	\$130.27	\$161.01	\$199.01
United Energy	Three Phase CT Connected	\$74.84	\$104.31	\$127.87	\$158.05	\$195.35
	Quarterly Read					
	Single Phase Non Off-Peak	\$6.56	\$15.94	\$17.72	\$21.90	\$27.07
	Single Phase Off-Peak	\$8.47	\$18.73	\$20.81	\$25.72	\$31.79
	Three Phase Direct Connected	\$13.82	\$26.29	\$29.22	\$36.12	\$44.64
	Monthly Read					
	Three Phase Direct Connected	\$24.71	\$58.93	\$65.48	\$80.93	\$100.03
	Three Phase CT Connected	\$29.60	\$65.84	\$73.16	\$90.43	\$111.77

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Section 108 of the National Electricity (South Australia) Act, 1996

An Order-in-Council for Cost Recovery, made by the Victorian Minister for Energy and Resources, requires that the Essential Services Commission set “the maximum charges that each distributor may charge for ....metering services supplied to first tier customers or second tier customers with annual electricity consumption of 160MWh or less where the electricity consumption of that customer is (or is to be) measured using a revenue meter that is either an accumulation meter or a manually read interval meter ...(or) a remotely read interval meter.”

As the State Government mandate is for an accelerated rollout of remotely read interval meters to 100% of Victorian electricity consumers between 1 January 2009 and 31 December 2012 – rather than only 40% of consumers over five years as mandated by the Essential Service Commission under the manually read interval meter rollout – it is anticipated that the Essential Services Commission will approve *excluded services charges* that will apply from 1 January 2009 additional to the *prescribed services charges* listed in the table above.

Further, Clause 7.1 of the Order in Council for Cost Recovery imposes exit fees upon retailers as follows:

An exit fee, determined by the Commission in accordance with this Order at the time of making a determination under clauses 4.1 or 5.1 must (except as otherwise agreed by the relevant distributor) be paid by a retailer to the distributor where:

(a) that retailer becomes the responsible person in respect of a metering installation for a customer with annual electricity consumption of 160MWh or less which, immediately prior to that time, included a revenue meter that is a remotely read interval meter that has been previously installed by a distributor in accordance with the functionality, distributor performance levels and distributor service levels set out in a further Order in Council to be made under section 46D of the Act; and

(b) the responsible person in respect of that metering installation immediately prior to that time was the distributor.

Such exit fees apply regardless of whether the distributor has achieved and maintained expected levels of service, quality, reliability and performance or not.

Interestingly, while the Order-in-Council for Cost Recovery, requires that the Essential Services Commission set “the maximum charges that each distributor may charge for ....metering services” – where would the incentive be for distributors to offer charges lower than “the maximum charges” if they are not exposed to competition?

Competitive Metering Services Charges

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Confidential information omitted in accordance with  
Section 108 of the National Electricity (South Australia) Act, 1996

It is very clear that, through economic regulation, service prices will be more expensive than through competitive service provision.

### Paradox

There is a fundamental *paradox* within the Victorian State Government's position.

The responsible person is a *role* not a *service*!

On the one hand the Victorian State Government "only seeks to specify that (the distributor is) the responsible person"<sup>35</sup> so that it can appoint specialist service providers on a competitive basis; while on the other hand it seeks to entitle the distributor to recover the costs associated with the provision, installation, maintenance, routine testing and inspection of relevant metering installations as though the distributor is the service provider.

So which is it?

Is it the intention that the distributor be the responsible person or metering provider or both?

Is it appropriate that a distributor be allowed to make a return simply for appointing a metering provider or metering data agent?

Put another way, if Metropolis and Centurion are forced to provide services through a distributor, as the derogation proposes, why should the distributor be entitled to add a margin to our service charges?

Why should a retailer – who actually pays for the services in accordance with clause 7.3.6(a) of the National Electricity Rules – pay a distributor \$1.07¢ when they could pay the actual service provider directly only \$1.00¢?

What value has the distributor actually added?

And given that no party can contest that decision, is it not in the distributors interests to select higher rather than lower priced service providers in order to garner more revenue? – noting that, thus far, no Victorian distributor has sought tender responses from Metropolis or Centurion to offer metering services under the derogation.

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<sup>35</sup> AMI Rule Change Proposal (Jurisdictional Derogation - Victoria), August 2007 – page 7

## Information Asymmetry

### The Essential Services Commission notes:

The privatisation of an industry that displays monopoly characteristics will often give rise to tensions between a firm seeking to maximise returns to shareholders and the expectations and objectives of customers. The task of economic regulation is therefore to design incentives that align the commercial interests of the distributors with the interests of society at large, namely securing a reliable supply at an optimal price and quality.

However, regulators must overcome a number of not insubstantial hurdles when implementing effective regulatory controls. The most notable of these relates to the information asymmetry that exists between the regulator and the utility. The combination of the reliance on the information provided by the utility and a focus on shareholder value means that utilities have a clear incentive to “talk up” the future operating cost and investment requirements of their networks and to “talk down” their future sales potential, in order to secure more generous price controls. Designing and managing regulatory processes that recognise these incentives and address the asymmetry of information is a well recognised and fundamental challenge for monopoly infrastructure regulators.

The regulatory controls that were introduced by the Office of the Regulator-General in 2001 were specifically designed to address these hurdles. The implementation of a building block revenue requirement along with an efficiency carryover mechanism was designed to provide distributors with an incentive to reveal their efficient costs over the course of the first regulatory period.

The central proposition of the framework was that under-spending against the expenditure benchmarks would be rewarded equally irrespective of the year in which the under-spending occurred. Under this framework it was assumed that the distributors would have a reduced incentive to defer efficiency improvements or allow expenditure to increase towards the end of one regulatory period so as to obtain more generous expenditure forecasts in the following regulatory period. Given this, it was expected that revealed costs from the first regulatory period could be given greater weight in establishing efficient expenditure forecasts for the next regulatory period. In hindsight the Commission underestimated the challenges that would present themselves in relying on the reported costs of the distribution businesses.

One of the main factors complicating the Commission’s task has been the considerable restructuring of the distribution businesses since the implementation of the current price controls, including arrangements entered into by the distributors with entities with common ownership that are not directly covered by the regulatory regime.

In the period since the last review, many of the distributors have entered into or extended existing arrangements under which other parties provide services to the legal entity responsible for distribution services under the Distribution Licence. Where there is an incentive to enter into an arrangement that is not arm’s length, the potential effect of such arrangements is to inflate or obscure the reported costs of the distributor.

Outsourcing arrangements, multi jurisdictional operations and other integrated organisational arrangements have accentuated the challenges with respect to obtaining transparent cost data and unravelling complex and changing cost allocations. This has raised issues in reconciling historic information with current forecasts and therefore the ability to determine reasonable forecasts and the efficiencies to be shared with customers.

Throughout the price review the Commission faced considerable difficulties with obtaining information to enable a proper assessment to be made of the costs incurred in providing distribution services. In some instances the difficulties were confined to delays, whilst in others the information was withheld entirely. In one instance, where information was not voluntarily provided by a significant service provider to a licensed distributor, the Commission issued notices under section 37 of the Essential Services Act 2001. The notices were subsequently appealed on the grounds that they were not made in accordance with the law and were unreasonable. The Appeal Panel upheld the appeal in part on the basis that the period of time within which the service provider was required to provide the documents and information specified in the notices was not sufficiently long. This was in spite of the fact that the information had been sought over a long period of time.

Although the Appeal has highlighted aspects of the law which will require clarification, and some procedural improvements which will need to be made in relation to the issue of section 37 notices, the Appeal Panel clearly accepted that the Commission could serve such a notice on parties other than regulated distributors and that the Commission did have the power to obtain the details of industry costs from sub contractors.

The entry by distributors into outsourcing arrangements, particularly where those outsourcing arrangements have not or are not capable of being appropriately market-tested, and the regulatory treatment of such outsourcing arrangements, is an issue that has been the subject of much consideration by the Commission. In this, the Commission is not alone — regulators in other industries and jurisdictions face similar challenges. However, it is critical to the integrity of the regulatory framework that regulators are able to investigate these arrangements and ensure that their existence does not prejudice the delivery of the benefits to customers under the regulatory framework.

As a result of the difficulty that the Commission has had in obtaining information on the costs of providing distribution services from at least some of the distributors, the Commission has been forced to either directly estimate relevant out-turn costs or make a number of adjustments to the information reported to derive their relevant costs for the 2001-04 period.

The necessity for such adjustments arises in the context of all forms of monopoly regulation that rely on business-specific cost information, because of the associated incentive to report or represent costs as being greater than they are. This is particularly the case where the benefits of efficiencies are required to be shared between distributors and customers, in which case there is a greater incentive for a distributor to enter into arrangements or adopt practices that distort the sharing of the benefits.

Whilst the Commission is satisfied that the expenditure allowances which it has made are more than sufficient for the distributors to meet their obligations and future investment needs, the Commission notes that an approach that relies on adjustments to reported expenditure may not be sustainable over the longer term.<sup>36</sup>

Distributors make money by achieving a set return on an agreed level of expenditure and then spending less than forecast – only encouraging them to talk-up their costs at the outset and pursuing lower cost alternatives after the price controls have been set.

Placing responsibility for the appointment of metering services providers solely in the hands of a non-competing distribution business hardly ensures that consumers will be the beneficiaries of the most competitively priced options – particularly given that distributors are in a position to appoint “entities with common ownership that are not directly covered by the regulatory regime” as Metering Provider and Metering Data Agent.

The opportunity for distributors to engage in ‘information asymmetry’, as described by the Essential Services Commission, is profound.

So no matter which way the derogation is intended to work, distributors are able to add costs and consumers are worse off than under a competitive framework where Metropolis and Centurion are able to contract services directly to retailers in their capacity as responsible person.

### Windfall Gains

In February 2006 the Essential Services Commission advised:

The incentive based regulation allows the (distributor) to keep the gain of a windfall cost reduction but after five years the efficiency gains must be shared with customers. The (distributors) now have a tariff that is the source of their revenue (that is subject to the price control), we do not look at costs of

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<sup>36</sup> Electricity Distribution Price Review 2006-10, Final Decision Volume 1, Statement of Purpose and Reasons, October 2005 – page 12-13

individual activities/projects. The corollary is of course is that if the cost of an activity goes up, or a transformer fails and needs to be replaced, they must cover this extra cost during the five year period of the review.<sup>37</sup>

A once off project involving the deployment of new and emerging technologies, such as advanced metering, simply does not lend itself to a regulated framework designed to achieve the outcomes of a competitive market.

As noted by the Essential Services Commission, *efficiency gains* achieved by a distributor during a regulatory period are not 're-distributed' in subsequent periods. They become 'windfalls' for the distributor.

All that the Essential Services Commission can do is apply the *efficiency gains* that lead to the windfall when setting prices in subsequent periods. But in the case of a smart meter rollout that must be completed in five years, there is not even that opportunity to take *efficiency gains* into account because there is no equivalent expenditure component.

### Investment Risk

Through economic regulation, distributors are not exposed to normal considerations of risk.

Investment is generally understood to mean the allocation of capital and other resources – including time and skill – to achieve an economic return. By its nature, investment is speculative, because there is no guarantee of generating a return, or even of recovering all of the invested capital. The investor therefore accepts a certain degree of risk.

But distributors are guaranteed a return on operational and capital expenditure expected to be incurred during a regulatory period, which includes any foreseeable risk for the introduction of new technologies, such as smart metering, under an arrangement where they are exclusively responsible.

In which case distributors do not accept any risk for the rollout of smart metering infrastructure at all. Under the proposed derogation the risk is to be transferred directly to Victorian electricity consumers through regulated charges.

Under these conditions regulated expenditure can never be reasonably described as "efficient investment", if indeed it can be described as investment at all.

### Efficient Investment & Use

Regulating distributor returns hardly exemplifies a model of *efficient investment* and *use* of metering services.

Unlike distributors, retailers compete against one another and therefore seek out not only the most cost effective services, but also services that allow them to differentiate themselves in the market – which in itself promotes innovation, not only in metering but also in the types of services available to consumers.

Distributor exclusivity prevents Retailers from seeking out better and more proficient service providers, thereby discouraging investment and the entry of new service providers to the market.

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<sup>37</sup> Email from Mr David Cornelius, Senior Regulatory Manager, Essential Services Commission, Victoria, 21 February 2006

Efficient investment in and use of smart meter provisioning and data management services can only be promoted through competition.

The Hilmer Report describes competition as “the striving or potential striving of two or more persons or organisations against one another for the same or related objects”<sup>38</sup> and continues:

Some aspects of this definition have been found to be particularly important by recent economic research:

- Striving or potential striving: It was once thought that markets would be efficient only when a number of firms were actually competing. Recent work suggests that the real likelihood of competition occurring (potential striving) can have a similar effect on the performance of a firm as actual striving. Thus, a market which is highly open to potential rivals — known as a highly “contestable” market — may be of similar efficiency as a market with actual head-to-head competition.
- Two or more persons or entities: Early economic work suggested that large numbers of competitors were important for the effective working of competitive forces. However, in some cases competition between a few large firms may provide more economic benefit than competition between a large number of small firms. This may occur due to economies of scale and scope, not only in production but also in marketing, technology and, increasingly, in management.
- Against one another: While the simplest notion of competition sees firms providing identical products or services and competing largely on price, work in business strategy suggests that this is the exception rather than the rule. In practice, competition occurs through firms seeking to provide different mixes of benefits to consumers, some of which are already reflected in price and others of which are reflected in other elements of value to the customer such as service, quality or timeliness of delivery.
- Related objects: Competition need not be between identical products or services. Economics has long recognised competition between substitutes. It is the striving to meet the same consumer need that is the essence of competition and this is reflected in ways in which this is met by different market participants.<sup>39</sup>

Competition creates tension requiring existing service providers to perform better and be efficient in order to maintain or improve their position in the market. Importantly, competition encourages new, efficient organisations to enter the market at anytime.

Regulations that restrict “competition between substitutes” also limit *efficient investment* in the development of alternate technologies that may give rise to new products and services that have more to offer consumers.

If governments around the world had restricted all competition against the “natural monopoly” of PSTN networks, closing the door to the possibility of *efficient investment* in wireless mobile communications, we would not have the GSM, GPRS and 3G networks upon which we have all come to rely.

### Quality and Reliability

There is no guarantee that the Victorian distributors will deliver service quality or reliability to mass-market consumers – noting that the technology trials conducted by the distributors during 2007 focussed only on the communications capabilities.

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<sup>38</sup> National Competition Policy Review, Prof Frederick G Hilmer, et al., August 1993 – page 2 (taken from F G Dennis, “Competition” in the History of Economic Thought, 1977).

<sup>39</sup> Ibid. – pages 2-3

No 'live' meters were actually installed, no data was, or has yet been, passed to market for settlements, and no end-to-end business processes were tested internally or with retailers.

The distributor trials performed poorly.

In relation to Power Line Carrier (PLC) the official trials summary report released by the Department of Primary Industries concluded that:

"...concerns were noted regarding the potential "headroom" should future communications bandwidth requirements increase significantly."

"...the PLC technology trials identified a number of technical issues that require further investigation and resolution; principally related to voltage 'flicker' and 'harmonics'."

"...one PLC trial was not progressed through to conclusion as the supplied technology supported only daily accumulation reads, not daily interval reads."

In relation to the DLMS Distributor Line Carrier (DLC) technology trials the report concluded that:

"...whilst available communications bandwidth may potentially be adequate to meet the requirements of the Functionality Specification, there remain a number of concerns regarding headroom for any future growth in communications bandwidth requirements. This observation does not preclude the possibility of further research and development by DLC DLMS vendors, but does indicate that such further work is likely to be required in order to better position this communication platform for AMI deployment in Victoria."

"It should be noted that one DLC technology trial was delayed and full field test results were not available in time for the preparation of the trials reports provided to the Department."

In relation to the Lonworks DLC trials the report concluded that:

"... there are systems that have sufficient communications throughput to meet the requirements to be prescribed by the Functionality Specification."

"However, much like the DLC DLMS trials, even under ideal conditions, current communications bandwidth limitations were observed and further investigations are likely to be undertaken by trialling participants to establish whether these constraints can be mitigated."

"It should be noted that one DLC LON technology trial was delayed and full field test results were not available in time for the preparation of the trials reports provided to the Department."

The only technologies that performed well were radio mesh and our GPRS trial, which do not rely on distribution network infrastructure for data communications, and are as readily available to competitors as they are distribution businesses.

As it stands, it does not appear that the Victorian distribution businesses will be ready to deploy smart meters before the later half of 2009 and, unlike Metropolis and Centurion, are certainly not in a position to make pronouncements or guarantee the quality or reliability of their services.

#### Section 88(1)

The Victorian State Government could have proposed any number of measures and implementation models to maintain competition among Meter Providers and Metering Data Agents to achieve its mandate but has instead adopted a 'policy' position that is the antithesis of the national electricity market objective.

If Metropolis and Centurion are able to offer Retailers a cheaper and more reliable service than the Distributors, why should Retailers be denied the right to avail themselves of those offers on behalf of their customers?

And why should other companies capable of doing the same be discouraged from seeking the appropriate accreditations and becoming new market entrants?

No form of distributor exclusivity for the provision of smart meters and related data management services contributes to the achievement of the national electricity market objective, and, subject to Section 88(1) of the National Electricity Law, the AEMC must reject all aspects of the rule change proposal as it does not promote *efficient investment in or efficient use of electricity services*, adversely impacting *price, quality, and reliability*, none of which is in the *long term interests of consumers*.

### **Existing Regulatory Arrangements**

Section 89 of the National Electricity Law states that:

In making a jurisdictional derogation, the AEMC must have regard to whether—

(a) the derogation provides for the orderly transfer of the regulation of the electricity industry in a participating jurisdiction under jurisdictional electricity legislation to the regulation of that industry under the national electricity legislation; or

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

(c) the derogation is necessary to exempt, on an ongoing basis, generating, transmission or distribution systems or other facilities owned, controlled or operated in the participating jurisdiction to which the derogation relates from complying with technical standards relating to connection to the national electricity system set out in the Rules because those systems or facilities, by reason of their design or construction, are unable to comply with those standards.

Points (a) and (c) clearly do not apply to the jurisdictional derogation proposed by the Victorian State Government.

The Minister states in his covering letter “that, in accordance with clause 89(b) of the National Electricity Law, the Victorian Government considers it necessary ...to establish the local distribution company as the exclusive responsible party for small customer metrology and in particular for the legislated rollout of advanced metering infrastructure” and that “this policy represents a continuation of the current position that distributors are responsible for small customer metering.”

Metropolis disagrees. The proposed derogation does not represent a continuation of “existing regulatory arrangements applying to the electricity industry within the Victorian jurisdiction” as required by section 89(b) of the National Electricity Law.

To the contrary, the proposed derogation represents a dramatic departure from the existing regulatory arrangements in Victoria for the provision of remotely polled interval meters and related data management services and, accordingly, the AEMC must inform the Victorian Government, that under section 89 of the National Electricity Law, it will not take any action in respect of making such a Rule.

Specifically, the derogation seeks four key deviations from the existing regulatory arrangements:

- To make the local network service provider the responsible person for type 3 & 4 metering installations on an exclusive basis for connection points through which less than 160MWh of electricity is consumed each year, such that:
  - the retailer may not elect to be the *responsible person* for a relevant metering installation under clause 7.2.2(a);
  - the retailer will not be the *responsible person* for a relevant metering installation under clause 7.2.2(b); and
  - the *local network service provider* will be the *responsible person* as if the relevant metering installations were referred to in clause 7.2.3(a)(2);
- Entitle the local network service providers to recover the costs associated with the provision, installation, maintenance, routine testing and inspection of relevant metering installations in accordance with clause 7.3.6(f);
- Allow the local network service provider to nominate the accredited Metering Data Agent to be used by NEMMCO to collect the metering data from the relevant metering installations despite anything to the contrary in any contractual or other arrangements between a retailer and NEMMCO or, indeed, a retailer and Metering Data Agent; and
- Regulate the terms and conditions upon which the local network service provider provides meter provision and data management services exclusively to retailers.

#### Responsible Person

Under existing regulatory arrangements Victoria's electricity Distribution businesses are not exclusively the *responsible person* for connection points, with remotely polled interval meters, that are *first* or *second tier* or are designated as *small* or *large*.

Schedule 7.2.3 of the National Electricity Rules sets the accuracy requirements for metering installations, including the volume limits at which each type of metering installation is required. A type 4 metering installation is required for any connection point with consumption of up to 750MWh per annum, and a type 3 metering installation is required for any connection point with consumption between 750MWh and 100GWh per annum.

Schedule 7.2.3 also allows each jurisdiction to set a maximum volume limit, up to 750MWh per annum, at which a type 5 or type 6 metering installation is required instead of a type 4 metering installation. The value of such a limit must be recorded in the Metrology Procedure and is set in Victoria at 160MWh.<sup>40</sup>

"The 160 MWh per annum threshold was originally set in the ACT, South Australia and Victoria based on a contestability tranche and estimates that the costs of a type 1-4 metering installation for customers below this threshold could not be justified relative to the benefits from a competitive retail market."<sup>41</sup>

The designation of connection points as either 'small' or 'large' coincides with the 160MWh threshold but is only used so that NEMMCO can apply MSATS change reason codes,

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<sup>40</sup> National Electricity Market Metrology Procedure, Version 1, December 2006 – Schedule 2, page 71 and Schedule 3, page 82

<sup>41</sup> Joint Jurisdictional Review of the Metrology Procedures, Draft Report – page 40.



allowing the time frames and objection rules for 'small' and 'large' connection point transfers to vary between jurisdictions.<sup>42</sup>

Nowhere in the National Electricity Rules, Metrology Procedures, MSATS Procedures or Electricity Customer Metering Code does it state that Distributors are "the exclusive responsible party for small customer metrology" where a type 3 or 4 metering installation is, or is to be, installed.

The 160MWh threshold has only ever been relevant because it is compulsory that connection points with second tier load above 160 MWh per annum have remotely-pollled interval meters.

As noted in the derogation proposal, Chapter 7 of the National Electricity Rules applies to connection points through which retailers sell second-tier load. But Chapter 7 also applies to a Local Retailer in respect of connection points with first-tier load.

Accordingly, subject to clause 7.2.3(b) a second-tier retailer and local retailer may request in writing an offer from a *local network service provider* in Victoria to act as the *responsible person* where a type 1, 2, 3 or 4 metering installation is, or is to be, installed and, as per clause 7.2.3(a)(1), the *local network service provider* is the *responsible person* only where the retailer has accepted it's offer.

In all other instances the Essential Services Commission regulates metering for first-tier customers through the Electricity Customer Metering Code, of which clause 7A.1 states:

On and after 1 January 2006:

- (a) The relevant distributor will be exclusively responsible for providing metering services to first tier customers with annual consumption less than 160 MWh who do not have a remotely read interval meter; and
- (b) The relevant retailer must determine whether it or the relevant distributor shall have responsibility for providing metering services to first tier customers with annual consumption greater than 160 MWh or who have a remotely read interval meter. The distributor must offer to provide the services if so determined by the retailer.

In practice the National Electricity Rules and the Electricity Customer Metering Code allows Victorian electricity retailers to become the *responsible person* where there is an intention to install remotely polled interval meters at connection points with consumption thresholds significantly less than 160MWh per annum.

Metropolis has entered into competitive meter provision contracts with Victorian electricity retailers who, in their capacity as *responsible person*, have appointed Metropolis as Metering Provider in accordance with clause 7.1(a) of the Electricity Customer Metering Code and clause 7.2.5(a) of the National Electricity Rules.

Metropolis has replaced a significant number of type 5 & 6 metering installations with type 3 & 4 metering installations at residential connection points, across metropolitan and rural Victoria, through which less than 160Mwh of electricity is consumed annually, and now owns and operates the largest portfolio of residential smart meters in the Victorian market.

The proposed derogation will prevent Victoria's electricity retailers from entering into such arrangements and, as such, *discontinues* an existing regulatory arrangement.

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<sup>42</sup> MSATS Procedures:CATS Procedures Principles and Obligations, Version 2.7 – page 43

### Cost Recovery

Under existing regulatory arrangements Distributors do not recover costs associated with the provision, installation, maintenance, routine testing and inspection of type 1-4 metering installations subject to clause 7.3.6(f), which applies only to type 5-7 metering installations.

The Victorian Essential Services Commission is responsible for determining price controls for the charges levied by the five Victorian electricity distribution businesses because, as sole operators of electricity distribution networks within a geographical area, there can be no competition for such services.

In 2004 the Victorian Essential Services Commission determined to unbundle the Distributors' metering services charges, from network charges, as this was rightly seen as a barrier to the development of a competitive metering services market<sup>43</sup>, allowing companies such as Metropolis to gain a foothold in the market and compete directly against Distributors for the provision of smart meters and related services.

The Victorian Essential Services Commission has since determined under *Electricity Industry Guideline No. 14: Provision of Services by Electricity Distributors* that:

Consistent with its position in the Electricity Distribution Price Review 2006-10, the Commission's final decision is that the provision of metering services for second tier customers with metering installation types 1, 2, 3 or 4 and the provision of metering services for customers (tier one and tier two) with a remotely read interval meter are contestable excluded services.<sup>44</sup>

When the Commission determines that an excluded service is contestable, the Commission does not require a distributor to submit a statement of a proposed charge and terms and conditions for that excluded service under clause 16 of the distributor's distribution licence. A decision that the services are non-contestable, therefore, means that a distributor would be obligated to offer these services to retailers for a regulated price and under standard terms and conditions. Conversely, a decision that the services are contestable means that a distributor may offer the services for a price that is not regulated.<sup>45</sup>

In making its final determination the Victorian Essential Services Commission stated:

...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. The Commission is aware that some distribution and retail companies have established their metering service businesses into stand-alone service providers. These metering service providers may be used to provide metering services both to the retailer or distributor's own customers, as well as other utilities.<sup>46</sup>

The proposed derogation *reverses* an existing regulatory arrangement relating to the recovery of metering costs.

### Metering Data Agent Appointment

Under existing regulatory arrangements there are no regulations in Victoria restricting the retailers' ability to contract their preferred Metering Data Agent for connections points with remotely polled interval meters.

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<sup>43</sup> Electricity Distribution Price Review 2006 Final Framework & Approach: Volume 1, Guidance Paper, June 2004 – page 138

<sup>44</sup> Contestability of Certain Metering Services, Final Decision Paper, 18 January 2006 – page 10

<sup>45</sup> Ibid. – page 3

<sup>46</sup> Ibid. – pages 5-6

Clause 7.9.2 (a) of the National Electricity Rules states that “NEMMCO is responsible for the remote acquisition of the metering data and for storing this data as settlements ready data in the metering database” while Clause 7.9.4 (a) states that “NEMMCO is responsible for the validation and substitution of metering data”.

As noted in the derogation proposal, under clause 7.3.5(c) “NEMMCO may use agency data collection systems to collect metering data, process metering data into settlements ready data and to transfer metering data to the metering database” on the basis that, subject to clause 7.9.1(b1), “a person engaged by NEMMCO to provide agency data collection systems and agency metering databases ...compl(ies) with the service level requirements and any other criteria that NEMMCO establishes from time to time in relation to those functions, including accreditation requirements”.

Clause 1.1(c) of NEMMCO’s *MDA Nomination Rules (Version 2.0, 2003)* allows a retailer to nominate its choice of accredited Metering Data Agent in MSATS for approval by NEMMCO and only NEMMCO may approve or reject the nomination made by the retailer.

The proposed derogation *creates a new* regulatory arrangement where one has not existed before.

#### Terms & Conditions of Appointment

There are also no regulatory arrangements that prescribe the terms and conditions upon which type 1-4 metering installations are provided – such terms and conditions being determined directly between the parties.

Again, the proposed derogation *creates a new* regulatory arrangement where one has not existed before.

#### Section 89(b)

The Victorian State Government argues that section 89(b) of the National Electricity Law “raises an initial question of interpretation concerning the meaning of the words ‘existing regulatory arrangements in a participating jurisdiction’”<sup>47</sup> and submits that the reference “needs to be read in the context of the continuing development of the national electricity market and progressive transfer over time of regulatory functions from jurisdictional to national regulatory bodies.”<sup>48</sup>

We submit that the “question of interpretation” concerns the entire passage of section 89(b), the very clear intent of which, in relation to the making of a jurisdictional derogation, is to *continue* only *existing* regulatory arrangements *applying* to a participating jurisdiction.

It is very clearly *not the intent* of this provision to *discontinue, reverse* or *create new* regulatory arrangements within a participating jurisdiction.

By requesting a jurisdictional derogation to allow Victoria to deviate from the National Electricity Rules, the Victorian Government sets the precedent that the National Electricity Rules are not, in themselves, to be regarded as existing regulatory arrangements in a participating jurisdiction.

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<sup>47</sup> AMI Rule Change Proposal (Jurisdictional Derogation - Victoria), August 2007 – page 18

<sup>48</sup> Ibid.

However, we submit that the National Electricity Rules can only ever be considered as “existing regulatory arrangements” in the Victorian jurisdiction on the basis that it is through the application of *National Electricity (Victoria) Act 2005* that the *National Electricity Law*, as set out in the Schedule to the *National Electricity (South Australia) Act 1996*, applies as law in Victoria. Consequently, Victoria is bound by law to comply with the National Electricity Rules.

As such section 89(b) applies only where the Minister of the participating jurisdiction considers it necessary and appropriate that an existing derogation to the National Electricity Rules *continues*, or if a change to the National Electricity Rules is proposed and the Minister considers it appropriate to *continue* the application of the existing rules. Neither is the case here.

### **National Electricity Market**

The Victoria Government infers that the “transition from jurisdictional to national regulation” in relation to metering is incomplete and that “there are conflicts between the Victorian instruments and the operation of the National Electricity Rules.”<sup>49</sup>

We strongly disagree.

The *national electricity market* has matured to a consistent set of rules and regulations regarding the provision of type 1-4 metering installations and related services that apply across all participating jurisdictions, notably:

- (1) Retailer choice to be *responsible person* and appoint its preferred Metering Provider at any connection points regardless of consumption volumes;
- (2) No regulated cost recovery for distributors;
- (3) Retailer choice of preferred Metering Data Agent; and
- (4) Terms and conditions established in contract between the relevant retailer and service provider(s).

We are not aware of any *conflicts* between Victorian regulatory instruments and the National Electricity Rules.

It seems clear to us that the only *conflict* is between the proposed derogation and the existing regulatory arrangements in Victoria, including the legislative provisions to comply with the National Electricity Rules.

Consequently, it is only the proposed derogation that threatens the continued orderly and progressive transfer of regulatory functions to national bodies, such as the AER.

The purpose of moving to a National Electricity Law was to ensure that there is no disruption to the national electricity market by any one jurisdiction introducing rules inconsistent with the national body of rules and regulations.

The proposed derogation diminishes the achievement of a nationally consistent and efficient electricity market. If one jurisdiction can deviate from existing jurisdictional arrangements, including its commitment to comply with the National Electricity Rules, then that establishes

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<sup>49</sup> Ibid.

that further deviation is possible undermining investor confidence in all aspects of the market structure and its operations – now and into the future.

### **Australian Competition & Consumer Commission**

The Australian Competition & Consumer Commission (ACCC) “considers that the key detriment arising from metering exclusivity (among distributors) ...is that it prevents responsibility for metering residing with the entity most likely to introduce innovative metering arrangements, the retailer”<sup>50</sup> and has previously determined that:

....derogations should be amended so that remotely read interval metering solutions that are suitable for small retail customers are not subject to distributor metering exclusivity. This would facilitate retailers’ pursuit of innovative metering solutions that are most suitable for their customers. The ACCC also considers that (such a) condition of authorisation will mitigate concerns regarding the efficiency and responsiveness of monopoly metering services provided by distributors.

Therefore, this determination imposes a condition of authorisation to ensure that any interval meter that incorporates remote reading capabilities, irrespective of how frequently the interval meter is remotely read, will not be subject to the derogation.

C1 Clause 9.9A.1 must be amended by the addition of the following provisions:

- (c) For the purposes of clause 9.9A.2 and 9.9A.3 of this derogation, a reference to a “type 5 metering installation” is a reference to a type 5 metering installation that includes an interval meter that is manually read.
- (d) Despite anything in the preceding paragraph, clauses 9.9A.2 and 9.9A.3 of this derogation do not regulate the provision, installation and maintenance of a type 5 metering installation that includes an interval meter that is remotely read, regardless of the frequency with which that interval meter is read.
- (e) In the previous paragraph, “an interval meter that is remotely read” means an interval meter that:
  - i) is designed to transmit metering data to a remote locality for data collection; and
  - ii) does not, at any time, require the presence of a person at, or near, the meter for the purposes of data collection or data verification (whether this occurs manually as a walk by reading or through the use of a vehicle as a close proximity drive-by reading);

and includes, but is not limited to, an interval meter that transmits metering data via:

- 1) Direct dial-up;
  - 2) Satellite;
  - 3) The internet;
  - 4) General Packet Radio Service;
  - 5) Power line carrier; or
  - 6) Any other equivalent technology.
- (f) This clause 9.9A.1 ceases to apply on the date on which clause 9.9A.2 ceases to apply.<sup>51</sup>

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<sup>50</sup> Amendments to the National Electricity Code, Victorian Metering Derogations, Final Determination, 2 March 2005 – page 37

<sup>51</sup> Ibid. – pages 37-38

### **Victorian State Government AMI Policy**

Rejecting the rule change proposal in its entirety will not hinder the Victorian State Government AMI Policy objective of rolling out smart meters to every home and business in the state.

In fact, had the State Government devoted its energies to working within the existing competitive framework, instead of outside it, and corrected the charging disparity caused by the Essential Services Commission's 2006-2010 price determinations, the rollout would already have commenced.

Amendments to the *Electricity Industry Act 2000* – Division 6A (Advanced Metering Infrastructure) – were made in August 2006 to enable Orders in Council that establish obligations on licensees for the mandated, accelerated rollout of smart meters to all Victorian electricity consumers and to set out details of the deployment.

In that context the Victorian Government is correct when it states that “the concept of existing regulatory arrangements as used in section 89 must be taken to refer to arrangements which are properly in existence within a relevant jurisdiction at the time the proposed derogation is being considered.”<sup>52</sup>

The August 2006 amendments to the *Electricity Industry Act 2000* and resultant Orders-in-Council must conform to the regulatory arrangements as they exist at the time with a view to ensuring their *continuation*.

The Orders-in-Council, since made, apply equally to retailers and distributors as licensees, and can be implemented by retailers with no more or less difficulty than a distributor, as the situation in New Zealand and the United Kingdom establishes.

The Orders-in-Council:

- (a) specify a process for determining who is to be a relevant licensee

This is currently governed by Section 7.2.3 of the National Electricity Rules. Retailers may choose to be the Responsible Person and appoint their preferred Metering Providers or may seek an offer from the local Distributor to be the Responsible Person.

- (b) specify the minimum functionality required of advanced metering infrastructure supplied or installed by or on behalf of a relevant licensee and the associated services and systems required for its support

It is a condition under clause 14.1(a) of each electricity Retailer's license that “the Licensee must comply with all applicable provisions of any ...Order in Council made or in force under the ....Electricity Industry Act 2000.”

Metropolis's meters comply with minimum functionality, such that a retailer that contracts Metropolis to deploy smart meters under a mandated rollout complies with this condition.

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<sup>52</sup> Victorian Government Rule Change Proposal (Jurisdictional Derogation), August 2007 – page 18

- (c) specify minimum standards of performance and service that must be met by a relevant licensee in respect of the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems

It is a condition under clause 14.1(a) of each electricity Retailer's license that "the Licensee must comply with all applicable provisions of any ...Order in Council made or in force under the ....Electricity Industry Act 2000."

Metropolis's meters comply with performance standards, such that a retailer that contracts Metropolis to deploy smart meters under a mandated rollout complies with this condition.

- (d) require trials of technologies to be conducted by or on behalf of a relevant licensee to identify the most cost-effective methods for the delivery of advanced metering infrastructure and associated services and systems and specify the nature and timing of those trials

Origin Energy, Red Energy & Victoria Electricity engaged Metropolis and Centurion to conduct the only 'live' market trials under the Victorian Trials program - testing minimum functionality & performance standards.

- (e) determine the minimum number of customers or supply points (or both) in respect of which a relevant licensee is required to supply or install advanced metering infrastructure and associated services and systems

It is a condition under clause 14.1(a) of each electricity Retailer's license that "the Licensee must comply with all applicable provisions of any ...Order in Council made or in force under the ....Electricity Industry Act 2000."

Metropolis's installation program is targeted at a 100% rollout of contracted sites by 31 December 2013, such that a retailer that contracts Metropolis to deploy smart meters under a mandated rollout complies with this condition.

- (f) determine the date or dates by which, and the location at which, the advanced metering infrastructure and associated services and systems must be supplied or installed and the date or dates by which the infrastructure, services and systems must become operational

It is a condition under clause 14.1(a) of each electricity Retailer's license that "the Licensee must comply with all applicable provisions of any ...Order in Council made or in force under the ....Electricity Industry Act 2000."

Metropolis's installation program is currently ahead of proposed percentages and date targets.

- (g) if a retailer is a relevant licensee, specify the responsibilities of the licensee on being notified of a customer's election to transfer to another retailer, to ensure there is no cost impediment or other impediment to that transfer arising from the licensee's provision of advanced metering infrastructure

It is a condition under clause 14.1(a) of each electricity Retailer's license that "the Licensee must comply with all applicable provisions of any ...Order in Council made or in force under the ....Electricity Industry Act 2000."

Metropolis's contracts with retailers ensures there is no cost impediment or other impediment to customer transfer between retailers.

- (h) provide for the setting and regulation of the prices, fees and charges that a relevant licensee who is a distributor may charge for or in connection with the provision, installation, maintenance and operation of advanced metering infrastructure and associated services and systems

There is nothing to prevent the Essential Services Commission regulating a default distributor offer under Section 7.2.3 of the National Electricity Rules - establishing an effective 'price cap' that retailers can accept or use as a guide.

Confidential information omitted in accordance with  
Section 108 of the National Electricity (South Australia) Act, 1996

### **Draft Rule Determination**

Metropolis and Centurion hold that as the rule change proposal is in the form of a *jurisdictional derogation*, the AEMC has no option but to reject the rule change proposal in its entirety under section 89, notwithstanding the AEMC's views as to whether the Rule change "will or is likely to contribute to the achievement of the national electricity market objective", and has no authority to make the rule change as the proposed derogation ***does not continue*** existing regulatory arrangements applying to the electricity industry in the jurisdiction of Victoria.

Section 99(2)(a)(iii) of the National Electricity Law requires that "a draft Rule determination must contain the reasons of the AEMC as to whether or not it should make the proposed Rule or another Rule, including if the proposed Rule or the other Rule (if any) is a proposed jurisdictional derogation, the reasons of the AEMC having regard to the matters specified in section 89" and Metropolis and Centurion call upon the AEMC to clearly articulate the reasons for its decision with regard to section 89 of the National Electricity Law.

Section 99(2)(a)(i) of the National Electricity Law requires that "a draft Rule determination must contain the reasons of the AEMC as to whether or not it should make the proposed Rule or another Rule, including the reasons of the AEMC as to whether it is satisfied the proposed Rule or the other Rule (if any) will or is likely to contribute to the achievement of the national electricity market objective".

Noting that there is no MCE statement of policy principles with respect to any aspect of the rule change proposal, and notwithstanding its decision and reasons with regard to section 89 of the National Electricity Law, Metropolis and Centurion call upon the AEMC to clearly articulate the reasons for its decision and to account for the weighting it may have given to any aspect of the national electricity market objective.

In particular, should the AEMC see fit to grant the derogation, Section 99(2)(a)(i) requires the AEMC to provide a clear and detailed accounting of its decision in terms of the 'facts' it has used to support its view that the derogations satisfies the national electricity market objective.



Metropolis and Centurion look forward to being able to continue to contract directly with Victoria's electricity retailers in their capacity as responsible person and to rollout residential smart meters in ever increasing numbers in the years ahead.

Yours sincerely,

Marco Bogaers  
Managing Director