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21st May 2015

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney NSW 1255

DRAFT RULE DETERMINATION

National Electricity Amendment (Expanding competition in metering and related services) Rule 2015
National Energy Retail Amendment (Expanding competition in metering and related services) Rule 2015

Dear Mr Pierce,

Metropolis Metering Services Pty Ltd (Metropolis) is an AEMO accredited Metering Provider and Metering Data Provider with a significant volume of contestable advanced meters installed across homes and businesses in all states and territories in the NEM.

Metropolis welcomes this opportunity to provide input into the draft determination for *Expanding competition in metering and related services*. As an existing accredited, competitive metering services provider, Metropolis has a keen interest in expanding the benefits of advanced metering throughout the Australia. As a leading innovator in metering, with existing products including solar, critical peak pricing, IHDs and customer portals, Metropolis applauds the approach taken in the draft determination, which supports further innovation of valuable services by supporting a market driven roll out.

In the attached appendix, Metropolis discusses areas of the determination which are unclear, may have unintended consequences or where there are discrepancies between the determination and draft rule. Metropolis also highlights some of the more controversial areas where our view is that the determination has made a particularly difficult decision.

Sincerely,

Charles Coulson
Regulatory Manager

Determination: 5.2 Implementation date
Rule: 2 Commencement
Metropolis supports the proposed timeframe of implementation in July 2017. While this rule changes drives a significant operational change to the market, there is very little fundamentals difference. The RP role (to be replaced by MC) exists currently; metering is currently competitive; and all participants can currently support competitive metering.

2 years should be easily sufficient to modify existing processes to suit the specifics of this rule change.

Determination: 4.8.4 Bypass options for DNSPs
Determination: F Arrangements for Victoria, F.4.3 Access to advanced metering enabled services and functions
Rule: 7.8.6 Network devices

Metropolis accept that a credible bypass threat is required for DNSPs to:

1) remove monopoly pricing capability from MCs
2) allow DNSPs to build capability that is not offered by MCs

Metropolis accept that the proposed rule closely matches the description within the determination and that the arrangements for Victoria are a specific example of higher level of existing meter related capability.

However, Metropolis claims that the determination is incomplete, and likely to have significant detrimental and unintended consequences in a number of ways:

- Physical space on a meter board
- Complex wiring
- CT metering installations
- Metrological compliance

Physical Space. Metropolis have provided examples of many residential sites where there is clearly insufficient space on the meter board to place an additional meter. These include sites where the meter panel is very small, where there are a significant number of additional control or protection devices, and where the placement of the devices blocks the installation of contestable meters. A rough estimates is that half of all residential sites in the NEM would not be able to accommodate a new meter without removing the existing one.

In these scenarios, significant remediation work would be required, which commonly would include building a new meter board or enclosure. This adds a cost from between "a few hundred dollars" up to "thousands of dollars", depending on how much remediation work is required. As a percentage of the total cost of installation, this is very large and even the lowest end of the additional costs are likely to impact the business case to roll out advanced meters.

This additional cost would be borne by the first advanced meter provider. Subsequent meter providers would be able to remove the first meter, and replace it with no remediation. This is a clear disincentive to be the first-mover, potentially delaying the roll out.

Complex Wiring. Metropolis have provided examples of residential sites where there are many different devices on the meter board. This includes a variety of meters, time switches, fuses and isolation devices. Every device on a meter board adds to the complexity of the board. More complexity of wiring results in longer and more costly changes, such as adding a meter, as well as a higher likelihood of error and equipment failure over time.

Again, rewiring a board to support an additional advanced meter is required only of the first contestable provider. Subsequent advanced meter providers will be able to simply replace the meter and retain the wiring.

CT Metering. For technical reasons, CT metering cannot support multiple devices. If an existing meter is used for specific DNSP services and may not be removed, then the site cannot have competitive metering. In the same way, devices cannot be added to a CT metering installation.

Metrological Compliance. The Meter Provider is obliged to ensure the metering installation is accurate and safe. In the case of existing devices, the Meter Provider does not have visibility of the purpose or maintenance of these devices. As such, there is no way for the Meter Provider to verify their safety. While this may technically be inappropriate, existing process is to assume that the DNSP provided equipment is safe and reliable, unless there is obvious reason for concern (corrosion, exposed wires, etc).

If a DNSP is able to install their own devices on the metering panel, this requires breaking Meter Provider seals, and modifying the metering installation. The Meter Provider at this point has no assurances of either the safety or reliability of the metering installation. In order to verify these things, the Meter Provider would be required to perform a site visit, redo the commissioning tests and remediate if any problems arise. In a best case, this is a cost of about 50% of the initial installation cost.

For a small number of sites most of these issues can be resolved, for a cost, without significant impact at a national scale. Metropolis view is that the draft rules, if implemented, would allow DNSPs to leave their metering and other equipment on site as the default action. In its simplest form, even a single-register spinning disk mechanical meter could be used as a monitoring device to validate that new meters are, for example, correctly configured.

Metropolis's biggest competitor is not other competitive metering providers. It is incumbent regulated metering providers. Regulated meter providers have incentive to

protect their revenue streams. This could be done by making it non-viable to install advanced, competitive, metering. Indeed, the ideal outcome (economically speaking) for regulated meter providers is total failure of competitive metering market. Any other outcome means the end of the regulated metering business. While this is an extreme scenario, it is important that the rules do not provide mechanisms for opportunistic protective actions to be taken by these businesses.

In order to balance the need for credible bypass mechanism for DNSPs with the need to minimise the cost impost on Meter Providers, Metropolis suggest the following additions to the draft determination:

- *A MC should have the authority to replace like-for-like capability.*

The vast majority of existing DNSP equipment on metering boards, excluding metering, is related to controlled loads. These come in two forms: Time Switch and Ripple Control. Both forms of control are easily replicated by advanced meters, with the additional benefit of being able to be remotely re-program the controls. There is no reason why a mechanical time-switch, or an entire meter with a build in time-switch, should be retained if there is a capable meter in place.

- *A DNSP should maintain a public register to identify the services which it wishes to retain, and the on-site equipment that supports this service.*

In order for a MC to replace like-for-like capability, it must have visibility of the services at a site. Unlike competitive metering providers, regulated metering providers have no IP or competitive advantage to protect A register of services, or similar, would also ensure that subsequent MCs provide the same services, even after the DNSP device has been removed. Such a register would also provide insight and inputs for MC's to develop DNSP focused services.

- *A DNSP must attempt to negotiate in good faith with an MC for a service, prior to installing their own device.*

This is a general comment, however there are specific examples where a DNSP may not negotiate in good faith. EG: While the cost of negotiation and developing contracts is significant, it is highly likely that most services required by a DNSP will be able to be covered by framework agreements, reducing the cost of subsequent implementations of the service. For example, a single implementation of a voltage monitoring system would likely be cheaper than negotiating a data feed from an MC, however implementing 1000 voltage monitoring systems would be much more expensive than negotiating the data feeds.

- *A DNSP should only use the meter installation for installing equipment if there is no other option.*

For example, the meter box is not a suitable replacement location for existing pole-top devices. The meter board or meter enclosure is provided by the consumer for the specific purpose of metering, meter protection and meter control equipment. While there may be situations where using the meter board for other purposes is appropriate this should be

agreed by the consumer. For example, on occasion Metropolis installs off-market metering in the meter box to support advanced services, in consultation with the consumer.
It should be clear that the meter enclosure is the consumers' property. This is not the property of the DNSP, nor the Meter Provider, and should never be treated as if it is. As the draft rules are written, the DNSP is given the right to put any equipment on the consumers' property, with very limited restrictions. To take it to an extreme, ridiculous extent, a diesel generator to address network constraints could be considered "operation… of its network" and placed "adjacent to a metering installation".

It should be noted that these recommendations are relevant to all jurisdictions, including Victoria. Explicitly, the higher the level of capability that a regulated metering provider offers to its regulated network, the more important that it is that these services are publicised and detailed, in order to enable continuity of service in the case of contestable meter churn.

Determination: C1.5.3 Services to be included in the minimum services specification
Rule: S7.5.1 Minimum services specification

Metropolis agrees that the minimum services specification is conceptually appropriate to a contestable market. Restricting the specification to fundamental and ubiquitous services minimises the base cost, with additional valued services able to be offered at market rates.

However, clarification on the scope of service *(a) remote disconnection service* and *(b) remote reconnection service* of the services is required. As well, the intention and viability of some aspects of *(f) advanced meter reconfiguration service* is unclear.

Remote disconnection and connection is a standard service on whole current metering. However for 3-phase this is significantly more expensive, adding up to $100 per meter, with a significantly larger meter, requiring approximately 50% more space on the meter board. Clearly the cost is a barriers to upgrading to advanced meters, and as discussed previously, space on meter boards is frequently limited.

While Metropolis see benefits to a blanket Rule that puts remote connection/disconnection on all meters, it is not clear that the benefits are ubiquitous in this case. 3-phase metering is typically used on mid-sized sites (SME or large residential), or anything larger. This does not appear to be the demographic which will most benefit from remote connect/disconnect. The understanding is that high turn-over sites (rental properties, for example) will most benefit.

There is also a concern with "large small business" sites being able to be disconnected remotely (eg, a small factory), where a sudden loss of power could be dangerous or damaging to costly equipment.

Given the smaller benefit, and much higher cost, Metropolis suggests that 3-phase metering be excluded from remote connection/disconnection. Note that there is nothing stopping a Retailer or MC from installing a 3-phase remote connect/disconnect meter if it is considered commercially beneficial to do so.

Even more difficult than 3-phase remote connection and disconnection is CT metered sites. It is not technically feasible to remotely disconnect a CT metered site, as the metering is not part of the primary circuit. Turning off the meter, does not prevent supply to the site.

Given this, CT sites should be explicitly excluded from the requirements for remote connection and disconnection.

Advanced meter reconfiguration service includes a series of parameters which can be set, such as data streams, meter display, thresholds and alarms. These are logical and appropriate, however:

- Some of the configurable items are not standard services, such as temperature alarms. Clearly if the service is not available, no configuration will be available.
- The final dot-point in the rules specifies the ability to set parameters that "*…specify how the voltage, current, power, supply frequency, average voltage and average current measurements are calculated*". The intention of this statement is not clear. These values are unlikely to be parameter driven (they are the fundamental properties measured by the meter), and if there are parameters associated with them, then these are directly related to the accuracy of the metering installation, and it would be inappropriate to be adjusting them as any part of a service offered to anyone other than the Metering Provider. As such, enshrining them in the Rules is unnecessary and the "Access Party" of LNSP and FRMP is misleading.

Metropolis recommends that the last two dot-points in *Table S7.5.1.1 Minimum Services Specification – services and access parties* be removed.

Determination: 3.3 Consumer Protections

"The draft rule requires both retailers and DNSPs to share information regarding life support registers and to notify each other regarding changes to the status of a shared customer's supply. In addition, jurisdictional safety regulators may develop further requirements with respect to safely disconnecting and reconnecting customers."

Metropolis, like all parties in the NEM, are very aware of the risks of connection and disconnection and support a robust scheme to ensure the safety of all parties involved. As a national metering provider, Metropolis is also aware of the additional burden to meet multiple jurisdictional requirements.

By virtue of being a service, remote connection/disconnection bypasses many of the safety issues, such as access and physical location of the fuses, legacy standards related to network configuration, etc. This provides an opportunity to reduce the regulatory overhead by developing a national standard for remote connect/disconnect.

Metropolis urges the jurisdictional safety regulators to look for opportunities to develop an efficient national approach to this.

Determination: A1.5.4 Role and responsibilities of the Metering Coordinator
Rule: 7.8.5 Emergency management

Metropolis acknowledge the intention of the emergency management components of the determination and draft Rules. It is noted on p109 of the determination that "*DNSPs could negotiate such priority in their contracts with the Metering Coordinator. However, there are likely to be benefits in AEMO developing a single NEM-wide definition of an emergency condition and order of prioritisation that all Metering Coordinators must comply with.*"

Clearly the intention is that *DNSPs could negotiate such priority* by paying for the service from meter coordinators. By developing standard emergency management processes and mandating that MCs must comply, the draft rule removes any reason for DNSPs to negotiate at all.

Pricing power has been much discussed and a significant amount of work done to ensure DNSPs are not prevented from negotiating a reasonable price for a service. This clause reverses the position, creating a service which must be developed and offered by the Metering Coordinator, with no opportunity to recover the cost.

Metropolis's view is that this is an inappropriate situation for a competitive service provider. It adds a barrier to entry for new service providers, and a cost on current providers. The magnitude of this cost is unclear. It should be recognised that this service will not be built by Metering Coordinators, but by Meter Providers.

Rule: 7.8.9 Meter churn

(b) A Metering Coordinator may alter a type 5 or 6 metering installation in accordance with paragraph (a) to make it capable of remote acquisition where the Metering Coordinator decides that operational difficulties reasonably require the metering installation to be capable of remote acquisition

(c) An alteration of a metering installation by a Metering Coordinator in accordance with paragraph (b) does not alter the classification of that installation to a type 4 or 4A metering installation.

(d) For the purposes of paragraph (b), operational difficulties may include locational difficulties where the metering installation is:

(1) at a site where access is difficult; or

(2) on a remote rural property

This rule has been retained with substantially the current wording. However the environment has changed; there is now a significant number of existing electronic MRIM type 5 meters within the market. It is unclear to Metropolis what the implications are, regarding adding a communications module to these MRIM meters, if it is not for "operational difficulties". Specifically, would adding a communications module alter the classification of that installation to a type 4, and would that type 4 installation be required to meet the minimum functional specification.

Determination: D4.5.4 Risk of a DNSP favouring its Metering Coordinator business

Finally, it is worth noting that DNSPs are required by the RIT-D process to consult with interested parties on non-network solutions and to consider any non-network proposals that may be submitted through this consultation process. If the $5 million cost threshold is met, this process will provide…

It should be noted that the current contestable market is about 80,000 meters. This supports 6 contestable metering providers. $5 million is approximately 5,000 meters, or 30% of an existing business.

A distributor roll out of 5000 meters would have a significant impact on the market. As such, the RIT-D threshold is not an effective protection against a DNSP favouring it's Metering Coordinator business.

None the less, Metropolis does not believe this impacts the Rule or Determination outcome.

Determination: E Access to Metering Coordinator services, E.4.4 Draft decision

… the Commission considers that regulation of access to metering services is not appropriate at the commencement of the market.

Metropolis is of the view that the market will develop well without the need for distorting regulations and strongly approves of this decision.

END