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10th September 2015

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney NSW 1235

Consultation Paper

ERC0181 – Multiple Trading Relationships

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 and off-market meters installed across homes and businesses in all states and territories in the NEM.

Metropolis supports the intention of the *Multiple Trading Relationships* rule change request, however it is unclear how this change can progress given the negative business case and lack of business proponents. As a provider of metering services, Metropolis has an interest in ensuring any rule changes allow for the most efficient use of physical infrastructure to offer innovative services via the metering installation. This includes offering services to multiple Retailers under this rule change.

The attached appendix details, Metropolis' responses to the consultation paper, with a specific focus on aspects relating to metering.

Sincerely,

Charles Coulson
Regulatory Manager

General position:
Metropolis supports the objectives of the *Multiple Trading Relationships* (MRT) rule change proposal. However the proposed solution is prohibitively expensive for residential consumers. If MTR is to be implemented, it is important to allow an option for a single metering installation to record all required data.

Metropolis's view is that a significantly deeper understanding of metering options is required to ensure the greatest value can be extracted from metering installations in regards to the MTR. The considerations of multi-element metering touches on this topic, but are incomplete to the extent that they are misleading.

QUESTION 1
There has been limited change to the market since the original business case, and the change has been largely incremental. Continuing advances in energy technologies, such as battery and solar, support MTR. The increasing likelihood of the introduction of the Meter Coordinator role, with the ability to offer services to multiple parties, provides the possibility of different approaches, potentially reducing the cost of MTR, or offer alternative avenues to gain the same benefits. New consumer products such as voltage correction, solar PPA and electric vehicles provide avenues to realise the benefits of MTR. International markets demonstrate examples of energy arbitrage, distributed generators and peer-to-peer energy sales, raising the prospect of future commercial products which could utilise MTR. We also see the end of generous government sponsored solar feed-in tariffs, which may result many residential solar "pro-sumers" seeking out better methods of monetizing their investments.

While none of these are new, the steady advance in so many related areas suggests that the value of MTR may be increasing. However, without industry proponents, it is very difficult to see the overall business case significantly improving.

QUESTION 2
The assessment framework should carefully consider the accessibility of any solutions proposed. In a situation where a second metering installation is required, the increased complexity and the additional cost of multiple metering installations would make the proposed solution non-viable for most residential sites. Considering the purpose of this initiative is to enable access to energy services to residential consumers, a minimum-cost solution is necessary.

Metropolis view is that a single metering installation (with a single meter coordinator) will provide the minimum-cost solution in most cases, and thus must be explicitly allowed in the MTR rule change.

QUESTION 3
1. It is difficult to accurately predict the future. Considering this rule change is likely to be at least 3 years away, the commentary on the future services is speculative. Metropolis do

not believe that many of the services proposed will eventuate, and if they do, MTR will not be the key driver or enabler.

For example, a charity offering free electricity for a specific appliance could simply use an off market meter and provide a rebate based on the consumption. This would be cheap and viable in today's market. The alternative is that the charity becomes a Retailer, which includes a significant amount of technical and compliance work, and then does essentially the same work of installing a meter and providing a rebate. Why go through the additional expense of becoming a Retailer?

Another example, Network deployment of storage behind the meter on consumer's property, seems to be a very complex and expensive approach to rolling out storage. Currently at least two DNSPs in the NEM are building network-scale batteries, which are more efficient than behind-the-meter consumer-sized batteries, and do not have the issues associated with using consumer property. While technically possible with MTR, there doesn't seem to be any business case.

Energy aggregators are not currently viable, due to excess capacity in the generation market, which is suppressing wholesale prices. This may change, and when it does aggregation will be supported by MTR. The timing of this is difficult to predict in the current climate, and the benefit is difficult to assess, as the benefit is incremental over the offer Retailers make for embedded generation.

Charging for EV's is a viable use of MTR, however the scale of the market is small, and there are alternative approaches where the same outcome can be achieved. For example, Nissan may partner with Origin to provide dedicated charge points (separately metered, arranged by Origin's Meter Coordinator), which Nissan pays for.

It is critical that any rule changes do not rely on a complete list of services. In order to encourage innovation, new services must be able to be implemented without being vetted by regulatory parties such as the AER. It should be noted that two rapidly growing services, Solar PPAs and Embedded Network services, currently require explicit exemptions from the AER.

2. AEMOs framework eliminates the need for a second physical connection to the network. This clearly enables a more cost effective process. It should be clear that not only does there not need to be a second line to the site, but there also does not need to be a second metering installation. The additional cost of a second metering installation is likely to outweigh the benefits of the services in many cases.

The fact that the process is *more* cost effective, or *more* effectively enabled, does not mean that it is actually cost effective or effectively enabled. The question remains: are the benefits enabled sufficient to justify the costs associated with this rule change? Evidence to date suggests not.

Metropolis

QUESTION 4

1. The ability of different services to capture efficiency benefits depends on the services that are available. As previously described, it's not possible to accurately assess the services that will exist in the future, or how the benefits associated with them can be realised. Metropolis has no issue with the value classifications KPMG has assigned to the identified services. The linkage between these benefits and MTR, however, appears to be quite limited given the alternative approaches which are available.

2. Coordination and split incentive issues are of critical importance in this initiative, as with other projects in progress. Where the consumer is directly exposed to the underlying cost, these incentives are aligned. A consumer can decide on the best outcome for themselves, and these will support industry wide objectives.

Where consumers are not directly exposed to the underlying costs (network augmentation and ancillary services, for example), it is very difficult to align incentives. One option is that the parties who are responsible for these services offer payments for distributed services offered by consumers. EG, DNSPs offering feed-in tariff rates in specific network-constrained regions, during peak periods. There are a series of rule changes underway which may encourage existing incumbents to develop product offerings that support distributed services, however the effectiveness of such schemes has historically been very limited.

QUESTION 5

1. The costs identified range from $350 to $6500. Where a second metering installation, a meter board upgrade, upgraded service mains or in-premises wiring are required, it is difficult to imagine the costs ever being recovered from a residential sites.

This sort of cost would obviously make MTR useless to residential sites, where the benefits of MTR would likely be a few hundreds of dollars per year.

2. AEMO's model would reduce direct costs for customers who want to engage with multiple FRMPs. But not significantly. The suggestion that there would be two separate metering installations, with two separate meters, would not make sense in some situations (for example, where import load is purchased from one Retailer, and export is sold to a different retailer). It should be clear that where one meter or metering installation can support the required services, the upfront and ongoing costs are likely to be reduced.

3. The direct cost difference between small and large (low voltage) consumers is likely to be similar, but this is not the key difference. Much more important is the benefit that can be gained by each of these classes of consumers. Residential consumers typically have smaller consumption and generation capacity, and thus less opportunity to recover the costs.

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QUESTION 6

1. Significant costs extend beyond Retailer, DNSPs and AEMO for implementing MTR. Meter configuration and meter data management are core functions of Metropolis, as a Meter Provider and a Meter Data Provider. As MP additional meter configuration and metering installation configurations would need to be designed, field staff training would be required, logistics would need to consider alternative meter types and meters-per-job. As MDP all IT systems would need to be reviewed. The IT changes required are structural, the NMI (and date ranges) is uniquely associated with a Retailer requiring not only the change to allow multiple Retailers, but also all down-stream capabilities that may rely on this relationship to be either changed or verified to still function correctly after the related changes are made. MDP validation and substitution processes would need to be reviewed. A system change of this magnitude may also require compliance checks of MDP's by AEMO.

Clearly MP/MDP costs will need to be recovered, and ultimately result in costs passed through to Retailers and consumers. It should be noted that many of the costs associated with DNSPs are likely to actually be incurred by the MP/MDP functions of these organisations. Clarification may indicate a shifting of the original cost estimates, rather than a totally new class of costs.

2. MP/MDPs would have to perform the system changes prior to offering any services related to MTR. If it were possible to defer the changes, this would need to be done on the basis of commercial expectation of uptake (or lack of uptake) of MTR services. However, as this is a structural change, it is likely that participants and AEMO would need to update systems at the same time, in order to ensure data synchronisation throughout the market.

3. Metropolis view the MTR change as having a greater system and process impact than Competition in Metering (Competition in Metering is expanding the existing framework; MTR is fundamentally changing the data structure of every IT system in the industry). Attempting to implement these changes in conjunction with any other project significantly increases the complexity and therefore risk of the implementation.

Metropolis recommend not implementing MTR at the same time as any other major projects. In particular the Competition in Metering project underpins many of the current market reforms and should not be put at risk for any reason.

QUESTION 7

1. Many of the functions of MTR and Meter Coordinator are interrelated. For example, supporting voltage and frequency correction via dynamically controlled loads or battery discharge could be a service offered via the MC (in fact, the MC would have to offer the service, if it was operated via the meter). This is very similar to behind-the-meter battery storage attributed to MTR in the consultation paper.

In the same way, many MTR services would compete with MC offered services.

As previously indicated, a single MC and Meter Installation should be explicitly allowed, even if there are multiple Retailers at a NMI. Metropolis view this as enabling a significantly cheaper MTR solution.

2. The core purpose of metering is to support market settlement. Any MTR services that relate to the purchase or sale of energy from the NEM (ie, potentially excluding "behind the meter" activities, such as solar or batteries) must involve a responsible party who can settle the market. In practice, this means a registered FRMP.

3. Yes. Multi-element meters can support MTR at a lower cost to consumers than other metering configurations. In fact, single element meters (bi-directional - the exact meters mandated via the competition in metering rule change) can also support some aspects of MTR. For example, a distributed generator only needs access to the generation data stream, while the energy seller (retailer) only needs access to the consumption data stream. This is a single-element meter. To enable this via two meters would be a 100% replication of capability.

4. Multi-element meters are in common use and have been for decades. Multi-element advanced meters (type 4) are in common use. Metropolis frequently use two types of multi-element meter: single-phase with a controlled load and 3-phase meters. Both of these could be used to support MTR (along with single-element meters), depending on the exact services required.

The separation of elements to different Retailers would be new. The difficulty in implementing this *in conjunction with other MTR changes* is minor. The difficulty in implementing all MTR changes is huge.

QUESTIONS 8, 9 & 10
Metropolis has no feedback

QUESTION 11
1, 2. Metropolis has no feedback

3. Coordination of billing cycles is only a problem with basic meters. If additional metering is required to support MTR, then advanced metering will be required (post Competition in Metering implementation). The daily remote reading of advanced meters will eliminate any billing cycle coordination issues, as all required data will be available.

QUESTION 12
1. The de-energisation and disconnection of subtractive metering issues are identical to those faced within Embedded Networks. Where a parent NMI is de-energised, then all child NMIs will also be. MTR should consider the approach in the Embedded Networks

rules to ensure a consistent outcome across the market.

2. Metropolis's view of disconnection in relation to advanced energy services is encompassed by a broader issue: What is the purpose of the additional consumer protection offered under the NEL? Where advanced services are being taken up by consumers do they need the same level of consumer protection? Does the charging of my EV, or the selling of my excess solar generation require the same level of consumer protection as the ability to run my fridge or heater?

In general, Metropolis's view is that advanced services will only be taken up by consumers with a high level of understanding and engagement with their energy services, and that they are making an informed commercial decision. This is very different to the use of general electricity services, which are essential services that are required to maintain the standard of living all Australians expect.

Advanced services are offered under attractive conditions (for the consumer), because they coincidentally fall under an expanded consumer protection regime. An alternative view is that advanced services are unattractive to service providers, as there are significant additional consumer protection requirements. The result is reduced innovation in energy services, due to the restrictive consumer protection requirements.

3. It is unclear if any service providers will offer MTR based services at all. Attempting to predict if the uptake of unknown services will be significantly negatively impacted due to a risk which is limited to an unknown number of installations is beyond the capability of Metropolis.

However, if a service provider did offer a service, then they could mitigate this risk in a number of ways, depending on the nature of the service. They could have contractual arrangements to indemnify themselves where this event occurred, or arrange to have metering installed that is not subtractive.

QUESTION 13

Life support disconnection risk is very similar to Embedded Networks. MTR should consider the approach in the Embedded Networks rules to ensure a consistent outcome across the market.

QUESTION 14

1. Having a standing offer may not make sense for some MTR arrangements. Consider a behind-the-meter battery storage system where the Network is the FRMP. Would the Network be required to have a standing offer? And would that need to comply with the standard deemed arrangements, including notification of pricing and disconnection? This makes no sense in this situation. The same logic fails in most of the proposed services. Where a charity is purchasing power for a specific appliance, would they be required to have standard terms for the next party to move in? If this is the case, they would need to be

able to perform billing and credit management functions, which is far from the intention of the service.

This is another area where the existing consumer protection regime being extended to advanced services fails to achieve the intended outcome and significantly complicates the introduction of innovative services.

2. If there was a second connection point, then both would be required to have a standing offer. This makes no sense for residential sites. However, due to the cost-prohibitive nature of having a second connection point, this is unlikely to become common practice for residential sites.

QUESTION 15

1. Metropolis has no feedback

2. Metropolis support the view that MTR should be in Stage 2 of the power of choice rule changes. MTR is a significantly complex change to industry systems, and including it with Stage 1 projects puts the other projects at risk.

Metropolis is also of the view that a review of the consumer protection rules, to clarify the scope and ensure that only essential services are provided with additional protection, would help inform many of the questions raised in this paper.

3, 4. Metropolis has no feedback

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