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Electronic Lodgement – ERC0181

Dear Mr Pierce

RE: Consultation Paper Multiple Trading Relationships Rule 2015

United Energy (UE) appreciates the opportunity to respond to the Consultation Paper Multiple Trading Relationships Rule 2015.

UE recommends that the AEMC reject the MTR rule change at this time. The cost/benefit studies do not provide a compelling case to proceed with this rule. Allowing significant flexibility for the market to sort it out does not lead to efficient or low costs when dealing with mass market customers with some bespoke arrangements. There are significant costs to cater for the agility and flexibility being required of back end systems, transactions across the market and accurate billing to customers.

AEMC has undertaken several key reforms that have a significant amount of procedural, rule and jurisdictional policy changes yet to be finalised and implemented. The metering competition and related services and the network tariff reforms should be progressed with a focus on successful implementation across the market. These reforms need to be progressed to allow further innovation in services before making the market significantly more complicated as proposed by the MTR rule change. These reforms will be significant changes for customers to understand and be comfortable with, without the more complex billing arrangements that MTR would involve.

The market for innovative services from smart meters in Victoria has been limited as has the uptake of cost reflective tariffs suggesting an immaturity across the market. The flexible time of use tariff take in Victoria has been approximately 0.3% over the last two years, this does not indicate the level of maturity in the market or active engagement by a significant number of consumers to warrant the expenditure on MTR.

The MTR report by JacobsSKM note a \$450m to \$1,000m cost across industry to implement with a take up of about 6% by 2020 and 17% by 2030. The costs are significant and the take up is high for what is an immature market. The high take up expected by 2030 is unlikely to occur to justify the costs, technology and other options will allow the customer and other parties control of load, demand reduction, generation release etc. that benefit customers without the need for this complex arrangement on market. There is no business driver or need for the MTR.

Given that customers have sought out solar arrangements and are likely to seek out solar/battery, UE is not convinced that customers will spend the funds to create second on market connections to arbitrage retail price, rather customers will take control to reduce their load/costs. More complexity, in contrast may deter new entrant retailers as the policy costs of participating in the market increase and in fact reduce the level of retail competition and choice for consumers. The costs of winning customers will not be able to be smeared across the same level of load or customer profitability under MTR and may serve to increase costs further.

For the few customers that are seeking to disaggregate their load and seek the best retail price for certain appliances, there is the option of individual meters from the single point of supply without the introduction of the more complex settlement point arrangement proposed as this works within the existing framework and avoids the significant expenditure on IT system changes.

There is nothing to indicate a significant market failure that warrants this level of change/cost to consumers, there is no demand that we are aware of that requires this change. The innovations in services will happen with technology and this is likely to occur in relation to energy control and tools for the customer that occur around the meter without the need for the complexity of this on market approach.

UE has provided a detailed response in the Attachment. In summary:

- The solar power purchase agreements or off market selling arrangements are thriving with the number of exemptions exceeding the number of licenced retailers. Innovative businesses are providing options to customers without the need to be on market with MTR arrangements. On this basis, there is no compelling reason to make the market arrangements far more complex as there is no market failure that warrants the additional complexity being proposed.
- Should there be significant benefits then the emerging solar power purchase agreements could readily be converted to a traditional embedded network and the sub metering could become on market.
- Existing market provisions such as the Small Generator Aggregator (SGA) framework and the recent AER's Retail Licence exemption offers potential avenues and enablers to what the MTR's spiritual intent may have been (i.e. competitive market framework). The robust uptake of non-traditional entrants seeking the Retail Licence exemption supports the notion of these existing market mechanisms working efficiently to introduce competition into the market.
- UE already utilises demand management as an alternative to traditional network augmentation and is trialling a number of other demand response arrangements. The demand management is captured via commercial agreements off market and there has been no need or compelling reason for these arrangements to be on market.
- The AEMC has considered at length the need to separate metering, network and retail charges on customers' bills and has not required this given the complexity and potential confusion for customers. The need to charge different network tariff components to different NMI's based on various metering and settlement point configurations is likely to be confusing for customers.
- The Consultation Paper recognises that this proposed MTR arrangement would be complex to administer, difficult for stakeholders to understand and will result in additional unnecessary costs, may not achieve its intended purpose and is ultimately likely to impose higher costs on consumers. UE supports this view. The UE estimate based on material available for the EDPR submission was that UE would spend \$8.7m on implementation of the settlement point vs connection point arrangements and amendments to systems including network billing and tariff application.
- The costs of implementation across industry are substantial for this rule change. Multiple cost benefit studies by various consultants have been undertaken and they did not provide a compelling positive benefit for consumers. There appears to be no market failure to warrant this intervention in an immature market. UE recommend that the business driver or need for the new arrangement be added to the assessment framework in order to justify a need for any expenditure on MTR.
- Customers do not need MTR to capture value, if the customer reduces load through energy efficiency, or some form of demand response then the customer has avoided the 'peak' retail and network costs. Where this can be done through 'control' equipment without the need for further settlement points and metering arrangements etc. this will ultimately be a more efficient option.

- The AEMC also needs to consider the ability of retailers and networks who might still be implementing the roll out of tariffs and the smart meters to progress further substantive changes and the risk of customer confusion with so many changes within such a short time.
- Focus should remain on progressing cost reflective pricing and the smart meter rollout. Benefits from these reforms will encourage customers to consider better their energy usage and costs, and energy service offerings. Where customers reduce consumptions at the right times then the benefits will be received across the supply chain without the need for MTR. It is better to keep the arrangements for customers simple whilst these reforms are being implemented.
- Creating multiple NMIs, metering and datastreams and role relationships (FRMPs, MCs, MPs, MDPs) at each site without the ability to individually connect and disconnect the metering (whether for disconnection for non payment or for meter replacement or electrical work on the customer side) should be avoided.
- There is not a high uptake of second connection points in either large or small customers. There has been no use of the small generator aggregator framework in the UE distribution area since the rule was implemented in 2013. It is counter intuitive that disaggregation of a small customer loads will provide benefits to the customer.
- The additional ongoing costs of second metering and retailer fixed charges may mean that the incremental benefit gained from the second retailer for a portion of load does not exceed the additional costs of the metering.
- The second connection point, off market energy services arrangements and potentially on market embedded networks (simplest form of the subtractive model – gross meter data forwarded from parent) are all available in the market today.
- Bespoke meter configurations and settlement arrangements that require manual intervention and amended tariff component application at a NMI compared to the standard network tariff will add to participant operating costs.
- Staged adaptation, i.e. waiting until there is a need and then changing systems, managing interval data billing manually and on a bespoke basis is not viable and would serve to increase operating and capital costs within a regulatory period. The LNSP could not delay delivering the capability given that the LNSP is limited to how far they can backbill the retailer.
- Datastream retail competition using a single meter is a step up in the level of complexity in relation to IT systems. This complexity will result in costs in the MDP/MP system, LNSP and FRMP systems which will ultimately be borne by all customers, not just those seeking appliance level retailer of choice. It is a key control in UE's systems that the same meter cannot be assigned to multiple retailers at the same time in order to ensure the integrity of metering and billing arrangements. This control will need to be broken and supplemented with more manual processes to ensure correct meter and settlement point configuration and tariff component application.
- Distributors cannot recover more than their allowed return. By consistent treatment of network tariffs at each settlement and connection point (where there is only one settlement point) these customers would be picking up a higher share of the policy costs that are being incurred for their benefit thus reducing the costs for other customers.
- The network tariff approach is based on a retail customer, UE suggest that a retail customer should be considered as a separate customer for each retailer. Network billing arrangements at a connection point or a settlement point are fundamental to recovery of network revenue and the tariff structure statement.
- UE consider that the final AEMC decision in respect of MTR may require reopening of the approved TSS's for the current 5 year period.
- On one hand AEMO propose that the market should sort out the model and in the detail of the rule change proposal it is recognised that the relationship between connection point and settlement needs to be recognised in CATS, distributor and retailer systems. Further the exact nature of the metering configuration and how it would operate needs to be clearly labelled and the network tariff components applicable i.e. whether all components apply or whether they are shared or whether certain components

are removed needs to be clearly communicated. The approach of evolution will risk incorrect quoting and billing of consumers.

- UE note the pages of proposed NER changes in the AEMO proposal and also the pages of possible jurisdictional rules changes required. There is a substantive body of work to clarify these requirements in the NERR and in Victoria to provide a clear set of roles and responsibilities on which to build processes. If this rule did progress, this work should only commence after all the requirements are locked down for metering competition, upgraded B2B and embedded networks and the consequential procedure and code changes etc. completed across the NEM
- The AEMC notes that the NERL would need to be amended to change the ROLR provisions from connection point to settlement point. This is likely to have a significant lead time once a decision to make the rule is made. Substantive work and expenditure should not be required until there is a clear decision to proceed, the NERL has been amended and there is a programme plan which includes the timeframes for all the jurisdictional amendments.

UE query the value of the rule change progressing and recommend that the AEMC reject the rule change at this time.

Should you have any comments in relation to this response please do not hesitate to contact me on (03) 8846 9856.

Yours sincerely

Verity Watson
Manager Regulatory Strategy

Attachment

1. Changed Market Environment

The proposed rule introduces a term called settlement which is the point at which energy is metered and financial settlement occurs. The term connection point would refer only to the physical connection to the power system. AEMC consider that this would allow a consumer to engage with a different FRMP for various portions of its load, without having to establish a second connection point. This rule has been developed following the Power of Choice review and the Electric Vehicle review where Better Place had pushed for separate metering and retail arrangements for electric vehicle charging within a customer's premises.

Since these reviews the market has developed further. With the introduction of NECF in most areas of the NEM there has been a significant growth in exempt selling arrangements which have allowed increased levels of embedded networks and leasing arrangements of solar panels with power purchase agreements. These off market selling arrangements are thriving with the number of exemptions exceeding the number of licenced retailers. On this basis, there is no compelling reason to make the market arrangements far more complex as there is no market failure that warrants the additional complexity being proposed.

Should there be significant benefits then the emerging solar power purchase agreements could readily be converted to a traditional embedded network and the sub metering could become on market.

The market will continue to evolve with demand response products to better control load or limit load during peak periods. The party controlling the load response can direct the benefit to network constraints or to supply constraints/wholesale market high priced periods. The act of reducing load means that the customer, retailer and network benefit through reduced costs. UE already utilises demand management as an alternative to traditional network augmentation and is trialling a number of other demand response arrangements. The demand management is captured via commercial agreements off market and there has been no need or compelling reason for these arrangements to be on market.

If this rule proceeded and facilitated the more complex metering and settlement point configurations then it cannot be presumed that there is only one customer within a connection point or that it will remain that way. Energeia reviewed the granny flat concept where there is one connection to the network and two NMI's and metering installations. Whilst the premises is owned by one person, the granny flat could also be rented to a different customer. Similarly the Better Place model was a second customer with metering in the garage so that a charging service could be sold by Better Place back to the customer. Once the metering configuration and settlement point arrangement is created for a single customer, it would continue on with separate customers unless there was action required to undo the arrangement and require separate connection points to the network. The single customer premises remaining over time is flawed, a customer can choose sub metering/control equipment which they operate or which they choose to let someone else operate in order to reduce their costs. AEMO note that it is the customer's responsibility to ensure that there is only one customer, otherwise the arrangements would need to be changed. UE consider that this model is complex for customers, particularly if the customers buys a property with these arrangements and does not fully understand the implications.

AEMC has completed a significant reform of network tariffs and the need to provide more cost reflective price signals to customers. These price signals and the tariff reform are yet to be fully implemented at the customer level. The roll out of smart metering will also help facilitate this reform and improved demand response. These are significant reforms to be implemented at the customer level over the next 5-10 years which will require a significant level of customer communication. The market is still immature as we can see by the uptake of time of use tariffs despite the tools available to customers and communication campaigns in Victoria. The small generator aggregator framework has also had no uptake which has warranted the changes in our distribution area.

UE strongly suggest that creating 3-4 versions of each of our network tariffs depending on which components might be constrained in being charged to the customer (or are being aggregated and charged to one retailer), along with metering reform and costs and the consequential changes to retail tariffs to replicate the distributor tariff components etc. is complex for customers. The AEMC has considered at length the need to separate metering, network and retail charges on customers' bills and has not required this given the complexity and potential confusion for customers. The need to charge different network tariff components to different NMIs based on various metering and settlement point configurations is likely to be confusing for customers. Further the consistent

understanding of the exact metering and settlement configurations and the correct and consistent application of both the network tariff and retail tariff components across industry is a concern. The industry does not even have consistent datastream naming conventions for general and off peak load let alone introducing these bespoke arrangements.

2. Assessment Framework

The AEMC will consider this rule change request against the following assessment framework, whether it:

- Facilitates competition in the market for energy services by encouraging new and innovative energy services and empowering consumers to make more effective decisions regarding how they use energy;
- Improves the flexibility and transparency of the regulatory framework;
- Is compatible with the development and application of consumer protections; and
- Provides a proportional response to the issues identified.

The Consultation Paper recognises that this proposed MTR arrangement would be complex to administer, difficult for stakeholders to understand and will result in additional unnecessary costs, may not achieve its intended purpose and is ultimately likely to impose higher costs on consumers. UE supports this view.

The costs of implementation across industry are substantial for this rule change. Multiple cost benefit studies by various consultants have been undertaken and they did not provide a compelling positive benefit for consumers. The UE estimate base on material available for the EDPR submission was that UE would spend \$8.7m on implementation of the settlement point vs connection point arrangements and amendments to systems including network billing and tariff application.

There appears to be no market failure to warrant this intervention in an immature market. UE recommend that the business driver or need for the new arrangement be added to the assessment framework in order to justify a need for any expenditure on MTR. The assessment framework should include that the new arrangements are required by a significant amount of customers and market participants.

The review undertaken by KPMG also considered a range of services that may be better facilitated by MTR. KPMG identified that MTR was not a prerequisite to enabling these services. Only two services were identified where MTR could be essential for that service to emerge and even these were questionable. One was a demand aggregator purchasing generation or battery release and providing a benefit more significant than the customer would receive from a retailer. The small generator aggregator framework provides this opportunity already and to our knowledge it is hardly used. The second service where MTR could be essential for the service to emerge was electrical vehicle charging where the supply contract follows the vehicle to charging at many locations, again this does not need MTR, a credit card charging arrangement could be used at multiple locations and the cost of the charging unit recovered in the charge service cost. UE consider that there is no compelling reason that these arrangements need to occur on market via an MTR mechanism compared to the costs across industry that will be borne by all customers.

Customers do not need MTR to capture value, if the customer reduces load through energy efficiency, or some form of demand response then the customer has avoided the 'peak' retail and network costs. Where this can be done through 'control' equipment without the need for further settlement points and metering arrangements etc. this will ultimately be a more efficient option. Providing smart meters and cost reflective pricing will drive the customer's decisions regarding energy consumption and will ultimately develop the market for energy services which do not need to be centric around a NMI and wholesale market.

The AEMC should also consider the value of substantial progress and successful implementation of the smart metering and cost reflective pricing reforms and the impacts of these arrangements on consumers. Successful implementation of these reforms which provide the drivers for consumers to seek out energy efficiency options or utilise demand response mechanisms via the smart meter if/where these are offered. These demand response arrangements form the counterfactual.

The AEMC also needs to consider the ability of retailers and networks who might still be implementing the roll out of tariffs and the smart meters to progress further substantive changes and the risk of customer confusion with so many changes within such a short time.

3. New Services Facilitated by MTR

Focus should remain on progressing cost reflective pricing and the smart meter rollout. Benefits from these reforms will encourage customers to consider better their energy usage and costs, and energy service offerings. Where customers reduce consumptions at the right times then the benefits will be received across the supply chain without the need for MTR.

There appears to be a presumption that functions available within smart meters that enable various forms of load control will not be offered or made available by the existing participants. This is not the case UE is already trialling these arrangements.

It is better to keep the arrangements for customers simple whilst these reforms are being implemented. There is no assurance that the average consumer will understand the difference between full retail tariffs (with all network tariff components) and reduced retail tariffs that do not contain all elements of a network tariff, they may be quoted and contracted incorrectly if the precise metering and settlement configuration and charging arrangements are not clear and consistently communicated across industry and markets.

4. Efficiency benefits

The KPMG report is reasonable although whilst it notes additional retailer system cost and complexity it fails to note the equivalent costs for the distributors.

5. Impacts on customers of enabling MTR

The Consultation Paper recognises that each connection point in market systems is treated as though it were a separate site. A connection point could have multiple meters, measurement elements and datastreams which are settled against a FRMP. It is these metering, datastream and role allocations that are managed for each NMI.

Creating multiple NMIs, metering and datastreams and role relationships (FRMPs, MCs, MPs, MDPs) at each site without the ability to individually connect and disconnect the metering (whether for disconnection for non payment or for meter replacement or electrical work on the customer side) should be avoided. Generally safety regulations and wiring rules would require separate fusing and connection/disconnection, including electrical isolation and earthing etc. of the circuits.

There is not a high uptake of second connection points in either large or small customers. There has been no use of the small generator aggregator framework in the UE distribution area since the rule was implemented in 2013. It is counter intuitive that disaggregation of a small customer loads will provide benefits to the customer.

Where large customers may be able to seek a benefit to offset the types of costs associated with a second connection point there has been little uptake as presumably these knowledgeable customers have shopped around and sought the best cost/service outcome from a single retailer. The additional ongoing costs of second metering and retailer fixed charges may mean that the incremental benefit gained from the second retailer for a portion of load does not exceed the additional costs of the metering.

It is in the incumbent FRMPs interest to meet the customers' needs otherwise the customer can readily churn retailer. The MTR proposal seems to assume that the current incumbent FRMP and the threat of retail churn will not allow the customer to seek out the best retailer/FRMP offering. To the extent that a customer wants some other form of load control, demand response etc. this same threat of retail churn applies and should lead to a competitive offer from a single retailer.

It is not obvious why disaggregating load to create retail competition at appliance level with the costs associated with wiring, fusing, additional meter boards and meter housing, meters and meter reading costs and additional contracting and billing complexity is warranted for an energy usage price benefit. Counter to this load aggregation and embedded networks appear to arbitrage tariffs to gain benefits for customers within the networks.

Where energy service providers are bundling equipment (solar or solar/battery) and netting off or reducing load taken from the grid, the full supply chain benefits are gained and customers are able to gain these benefits through the existing exemptions framework and still maintain the essential services aspect and associated regulatory protections with a grid connection. The expense of MTR arrangements across all customers has not been required for these customers to gain benefits. If there is a pressing need for additional wholesale price arbitrage then these

arrangements could be turned into an embedded network with the generator being a child NMI without the need of creating the complexity of settlement point/connection point management.

The second connection point, off market energy services arrangements and potentially on market embedded networks (simplest form of the subtractive model – gross meter data forwarded from parent) are all available in the market today.

MTR where a single meter with two way flow or multi-element meter where each of the meter datastreams are allocated a NMI may be a more cost effective option for the customer involved. Where remote connect/disconnect is required per measurement element this could make the physical meter cost higher and may require meters to be physically redesigned. International meter manufacturers may not be keen to redesign meters for such a small uptake in an already small Australian market

The cost of reading and validating the meter data may be no different to having multiple meters, although the data needs to be packaged and forwarded to additional retailers, instead of just the one FRMP and LR. The cost in MDP, retailer and network back end systems could be higher for this type of arrangement, although not all of the costs would be paid by the customer causing the costs. It is assumed that only one retailer would have a selection of MC, MP and MDP, the other retailers rights would be foregone/overwritten in this respect. These types of bespoke arrangements which may operate at transmission connection level are expensive and are unlikely to outweigh the costs of second metering when applied to small customers.

6. Impacts on AEMO and market participants of enabling MTR

The Consultation Paper notes that AEMO is likely to incur 6m\$ for MTR to implement and operate and retailers on average 13m\$ each and distributors 10m\$ each. AEMO already settle the market based on datastream level data, all financial transactions are simple and energy based and they are still incurring 6m\$. The UE estimate based on material available for the EDPR submission was that UE would spend \$8.7m on implementation of the settlement point vs connection point arrangements and amendments to systems including network billing and tariff application. UE supports the view that there is a substantial cost for implementation and the indicative costs appear reasonable.

The MTR report by JacobsSKM note a \$450m to \$1,000m cost across industry to implement with a take up of about 6% by 2020 and 17% by 2030. The costs are significant and the take up is high for what is an immature market. The high take up expected by 2030 is unlikely to occur to justify the costs, technology and other options will allow the customer and other parties control of load, demand reduction, generation release etc. that benefit customers without the need for this complex arrangement on market. There is no business driver or need for the MTR.

Given that customers have sought out solar arrangements and are likely to seek out solar/battery, UE is not convinced that customers will spend the funds to create second on market connections to arbitrage retail price, rather customers will take control to reduce their load/costs. More complexity, in contrast may deter new entrant retailers as the policy costs of participating in the market increase and in fact reduce the level of retail competition and choice for consumers. The costs of winning customers will not be able to be smeared across the same level of load or customer profitability under MTR and may serve to increase costs further.

AEMO and all registered participants and service providers will need to understand the connection point to settlement point relationships, the tariff components and charges at each settlement point could be different and would involve different and variable charging arrangements that will need to be communicated.

The Consultation Paper notes that subsequent to changes to the NER and NERR, AEMO will develop procedures for the day to day operation of the MTR. Whilst this does not prescribe the design in the Rules, it is expected to reduce the overall costs faced by participants. This means the details of the model and costs are not fully scoped until the procedures and build packs etc. become clear, not necessarily that the final approach results in reduced costs.

The changes to the connection point and settlement point arrangements will need to be recognised in connection point and standing data management, meter management, meter data management and billing systems. There will be costs associated with changes to these systems and the B2B and B2M transactions regarding the roles and responsibilities at connection points vs settlement points. Changes to these arrangements and the flow on impacts to billing are significant changes to large scale IT systems and will require significant regression testing. Bespoke meter configurations and settlement arrangements that require manual intervention and amended tariff component application at a NMI compared to the standard network tariff will add to participant operating costs.

On one hand the paper suggests the models should be flexible and the market should sort it out, however it does also pose whether AEMO may/will require changes to participant IT systems. If the rule does proceed then it needs to be limited in scope and prescriptive regarding the model otherwise the costs across industry will escalate. Essentially who gets to choose whether a more complex connection/settlement point configuration is adopted or allowable for connection to a specific LNSP? Presumably the LNSP cannot require certain options over others and by the nature of the changes and the complex testing required to change billing systems, the LNSP cannot wait for the operational requirement before amending its systems. Network billing of interval data cannot be done on spreadsheets and Regulatory Information Notification requirements and audit requirements on matters relating to meter data, billing and revenue are significant and cannot be accommodated outside of IT systems.

Staged adaptation, ie waiting until there is a need and then changing systems, managing interval data billing manually and on a bespoke basis is not viable and would serve to increase operating and capital costs within a regulatory period. Such an iterative approach may also lead to increased costs overall as project groups are reformed to deliver the next new model, undertake regression testing etc. In addition the complexity of this change is likely to take longer than the 9 months, that is the LNSP could not delay delivering the capability given that the LNSP is limited to how far they can backbill the retailer. Similarly under NECF if the retailer has similar issues with being able to correctly bill consumers in this situation, then if the retailer does not get paid because of their inability to deal with bespoke billing arrangements on even a small volume of customers then the LNSP may not get paid either. NER rule 6B.A3.1(a) states that if the retailer is not permitted to bill the customer then the distributor also does not get paid, that is if the retailer is unable to bill the customer due to lack of system capability beyond the 9 month period, there is also a risk the distributor will not get paid. Under a revenue cap this means that any complex billing arrangements that are created and not billed are ultimately paid for by all other consumers in addition to costs of funding the various model capability. This rule should be amended to avoid this situation where the distributor has the bespoke billing capability but the retailer doesn't and the distributor is not paid.

Many IT software systems and databases software products used in providing network services, communications services and meter data management are based on meter numbers or customer/NMI numbers. An increase in the number of settlement points which increases meter or NMI numbers will serve to increase the licencing operating costs paid by LNSPs and MDPs.

Increasing the number of datastreams to provide energy to one site or one customer ultimately requires more space for data storage and increased IT processing capability for meter data processing, billing calculations, aggregation and invoicing etc. whilst still allowing time for any batch processing and backups etc.

IT projects might be more efficient if changes to IT systems are clearly scoped and implemented together in an attempt to reduce the costs of programme management, testing, regression testing and release management etc.

7. Metering Arrangements

Role of Metering Coordinator (MC)

UE is concerned by the statement in the Consultation Paper that the MC's will be offering/promoting these MTR solutions. These bespoke metering arrangements could be used to lock a customer in to a certain retailer and MC (as a retailer) in order to create bespoke arrangements that are not readily transferred to other parties (e.g. MC and retailer) and ultimately might limit that customer and future customers to more limited retail competition. The MC's are not necessarily exempt from holding retail, generation and network licences in the respective jurisdiction. Where the Consultation Paper suggested significant flexibility be allowed in the framework and let the market evolve, the change of the connection point and settlement point relationships are significant changes across IT systems- billing, connection point management, NMI discovery, B2B etc. These cannot be developed on the run when the market evolves in any number of directions, if this were the case then accuracy of market settlement, billing, connection /settlement point management etc. will be impacted.

Role of the financially responsible market participant

While the FRMP can select the MC in the case of a connection point, NMI and single settlement point scenario, there may be benefit in restricting the FRMP selection where there are more complex metering and settlement point arrangements within a single premise. Datastream retail competition within a single meter seems to lend itself to the same MC, MP and MDP for each FRMP involved.

The subtractive metering is reasonably similar where there may be benefit in the parent and child meters having the same MC, MP and MDP. If the service levels for metering data are similar to Victoria where meter data is provided each day by 6am, issues with managing meter read frequency and billing cycles can be reduced and each FRMP is able to select their own MC and MP/MDPs. The MTR relationships, regardless of option would be best supported by remotely read interval meters which are read daily, UE supports the AEMC making such a service requirement on the new smart meters e.g. type 4b or 4s so that MTR could be readily enabled with Vic AMI type 5 and type 4 or 4b.

The Consultation Paper seeks views on the proposed MTR impacts on the AER exempt sellers framework. UE is of the view that the exempt selling framework appears to be encouraging new entrants without the need or value of on market retail competition, i.e. there appears to be a value proposition for these business models without the need to be retail licenced or authorised and holding the various distribution and generation licences that might be needed. UE suggest that this flexibility remain to encourage business models and innovation with light handed regulation as opposed to the need to be licenced and NEM registered and B2B accredited etc. The licenced networks role and those of other parties behind the parent meter need to be clearly established.

Multi element meters

Multi element meters may be able to support MTR to the consumer at a perceived lower cost as the one metering charge is split 2 or 3 ways across each FRMP, as opposed to three MCs and three meters and three metering charges. Given that three datastreams, three settlement points and three lots of data management and exceptions etc. will need to be managed, this will not be as simple as the customer only paying one metering charge. As noted earlier in our response these bespoke arrangements at transmission level are expensive. The multi element scenario negates the generally more cost effective solution of locating the additional meter at the position of the separate load. For example a meter embedded as part of an electric vehicles charging device in the garage would likely be lower cost than enabling all of the complications associated with using a multi element meter including additional wiring at the meter board.

Datastream retail competition using a single meter is a step up in the level of complexity in relation to IT systems. This complexity will result in costs in the MDP/MP system, LNSP and FRMP systems which will ultimately be borne by all customers, not just those seeking appliance level retailer of choice. It is a key control in UE's systems that the same meter cannot be assigned to multiple retailers at the same time in order to ensure the integrity of

metering and billing arrangements. This control would need to be removed with the consequence that heavy reliance will be placed on the exact metering, settlement point, datastream configurations being correctly communicated, understood and used by all parties.

Not only will the IT costs be greater but some of the FRMPs rights need to be impacted in relation to their choice of MC and ultimately MP/MDP.

Whilst this option might be viable for a two measurement element meter eg load and dedicated off peak load or load and net export, UE query this approach for multi-phase. Where a FRMP is assigned to each phase in a 3 phase or 2 phase meter, UE query that the National Measurement Act and regulations provide that the measurement at the single phase as opposed to all three phases is the accurate measurement for the purpose of trade.

In a single multi-element metering situation the second element cannot provide a full 100Amp load and would not be sufficient for fast charge of electric vehicles without redesign of single phase two element meters

The MTR report by JacobsSKM note a \$450m to \$1,000m cost across industry to implement with a take up of about 6% by 2020 and 17% by 2030. The costs are significant and the take up is high for what is an immature market. The high take up expected by 2030 is unlikely to occur to justify the costs, technology and other options will allow the customer and other parties control of load, demand reduction, generation release etc. that benefit customers without the need for this complex arrangement on market. There is no business driver or need for the MTR.

Given that customers have sought out solar arrangements and are likely to seek out solar/battery, UE is not convinced that customers will spend the funds to create second on market connections to arbitrage retail price, rather customers will take control to reduce their load/costs. More complexity, in contrast may deter new entrant retailers as the policy costs of participating in the market increase and in fact reduce the level of retail competition and choice for consumers. The costs of winning customers will not be able to be smeared across the same level of load or customer profitability under MTR and may serve to increase costs further.

Multi-element meters only have one contactor for remote connection and disconnection making it difficult for one retailer to disconnection for non-payment without impacting the other retailer. This also means that where this is a life support customer attached to one of the measurement element circuits, the other retailer will need to be aware of this on their systems at the connection point and settlement point level.

The alternative of increased number of settlement points and meters will increase the requirements on meter board and meter box size and space.

8. Network Charges and Network Support Payments

The MTR proposal changes the financial transactions in the market relating to wholesale and retail to the settlement point level. Essentially the retailer payment for energy in the wholesale market is at the settlement point, so is the customer payment to each retailer at the settlement point. On this basis it may be simpler to charge the full network tariff on a consistent basis. In the past the principle has been that all the financial transactions should be on the same basis i.e. using the same data and based on the same relationships, there appears no real compelling reason to change this.

Network tariffs include DUOS, TUOS, metering charges (for a service or for no service in the case of most NEM jurisdictions), pass through amounts and jurisdictional feed in tariff schemes etc. Where a connection point does have additional settlement points this creates direct additional costs to participants in the form of additional data streams, additional and more complex NMI standing data management, increased quantity of data to network bill and manage credit collections and disputes. Is it unreasonable given that some of the networks costs are

increased due to the second meter/NMI from both additional capital costs to create the MTR and additional operating costs to manage the settlement point for that customer to pay for the full network tariff like other customers in order to pick up a little more of the costs incurred for the benefit of these arrangements?

Distributors cannot recover more than their allowed return. By consistent treatment of network tariffs at each settlement and connection point (where there is only one settlement point) these customers would be picking up a higher share of the policy costs that are being incurred for their benefit thus reducing the costs for other customers.

UE suggest that the network tariffs and all components be charged consistently at all settlement points, this is no different to a single connection point with multiple occupancy today where each of the units has the same network tariff components applied. If this is not the case, there will need to be a doubling of network tariffs and network tariff codes in the market (i.e. to cater for the same network tariff without fixed charges and without the demand component for instance) and these will need to be assigned to the respective settlements points within each connection point so that they are available for NMI discovery. There is also a risk that retailer's contract and bill customers based on a full retail tariff inclusive of all network tariff components rather than charging for retail tariff energy only and meter charge, ie the customers might end up paying anyway. If the retail, network and meter components of charging are not clearly separated out, then customers may not be well informed about whether they are paying incorrectly or not.

UE agree that the need to aggregate multiple settlement points to obtain an accurate view of demand for demand billing is much more complex and will add to network billing complexity. AEMO note that MTR is detrimental to cost reflective tariffs involving demand or capacity.

The network tariff approach is based on a retail customer, UE suggest that a retail customer should be considered as a separate customer for each retailer. Network billing arrangements at a connection point or a settlement point are fundamental to recovery of network revenue and the tariff structure statement.

UE consider that the final AEMC decision in respect of MTR may require reopening of the approved TSS's for the current 5 year period.

If this rule change were to proceed or changes to AEMO procedures, on current likely timelines the more complex aspects of MTR would not commence until 2019.

In the case of a subtractive metering arrangement the AEMO proposal is not clear and it could be operated a number of ways. The proposal is unclear whether both models would be allowed or whether industry participants would need to conform to only one model. On one hand AEMO propose that the market should sort out the model and in the detail of the rule change proposal it is recognised that the relationship between connection point and settlement needs to be recognised in CATS, distributor and retailer systems. Further the exact nature of the metering configuration and how it would operate needs to be clearly labelled and the network tariff components applicable i.e. whether all components apply or whether they are shared or whether certain components are removed needs to be clearly communicated. The approach of evolution will risk incorrect quoting and billing of consumers.

If meter M1 is the parent meter with FRMP1 on NMI1 and the child or sub meter is meter, M2 with FRMP 2 on NMI2, then two different scenarios appear to be available:

Subtractive model - MDP option

- An MDP subtractive model where the parent MDP1 is provided the data for the child or sub meter, M2 from MDP2;
- MDP2 provides MDP1 meter data M2
- MDP1 provides FRMP 1 meter data (M1-M2), and the LNSP meter data M1 and M2
- LNSP bills FRMP 1 fixed network charges, network usage charges based on (M1-M2) and demand/capacity charge based on (M1-M2)
- LNSP bills FRMP 2, network usage charges based on M2 and demand/capacity charge based on M2.
- FRMP 1 bills the customer based on a normal retail tariff with all components, fixed retail charges including metering and network, retail energy usage charge based on (M1-M2) and capacity or demand charge based on (M1-M2)
- FRMP 2 bills the customer based on a reduced retail tariff fixed charged as there is no network component, retail energy usage charge based on M2 and capacity or demand charge based on M2

Alternatives for network billing of FRMP1, above the usage component, include:

- Full fixed charge and full demand;
- Full fixed charge and shared demand;
- Shared fixed charge and shared demand; and
- Shared fixed and full demand.

The respective alternatives for network billing FRMP2, above the usage component:

- No further charge;
- Shared demand;
- Shared fixed and shared demand; and
- Shared fixed.

There are 6 additional charging options available over the base network tariff. While industry can standardise one way of dealing with the complexity, each network tariff will have three versions of that tariff.

Subtractive model – Embedded network option

- MDP2 provides MDP1 meter data M2
- MDP1 provides FRMP 1 meter data (M1-M2) and meter data M1, and the LNSP meter data M1
- LNSP bills FRMP 1 fixed network charges, network usage charges based on M1 and demand/capacity charge based on M1
- LNSP has no need to bill FRMP 2, or FRMP 3 etc.
- FRMP 1 bills the customer based on a normal retail tariff with all components, fixed retail charges including metering and network, retail energy usage charge based on (M1-M2) and capacity or demand charge based on M1
- FRMP 1 bills FRMP2 the energy usage network charge for M2
- FRMP 2 bills the customer based on a reduced retail tariff fixed charged as there is no network component, retail energy usage charge based on M2 and no capacity or demand charge.

In a subtractive approach this is the preferred option as:

- AEMO already have the capability to undertake the subtraction for settlements for embedded networks;
- The model becomes agnostic to one or two customers and AEMO note that participants do not need to monitor or police this;
- The network tariff application and network billing is simpler; and
- Network tariff discovery becomes simpler which will lead to improved customer quoting, retail billing and reduced overbilling.

9. Definition changes, market registration and market rules

MTR limited to one customer

The AEMO proposal assumes that for MTR to apply there is a single customer at the physical premise and it is the customer's responsibility to ensure that this is maintained. AEMO does not recommend that participants be required to monitor or manage the status of the single customer at MTR sites. However if there is more than one customer at the site then the customer/site owner needs to adhere to the embedded network arrangements and

obligations. This could turn on whether a customer leases a solar and battery supply then the embedded network arrangements would apply should the customer wish to have access to the sub metering being on market or where the customer purchases a control product, the premises can remain as off market or MTR. The Embedded Network Manager rule change will change the obligations on a customer, however it is not clear who will communicate this.

Drafting

The key definition for the proposal to work is the definition of “settlements point”. The AEMC paper discusses the settlement point as the point at which energy metering and financial settlement occur. On the other hand, the connection point is the point at which there is a physical connection to the power system. However, the AEMO proposed definition refers to an “electrical installation”. There are words following “electrical installation” in the proposed definition but they really add nothing to “electrical installation”. The difficulty is that the proposed definition does not offer any guidance as to the point at which energy metering and financial settlement occur – it could be an “electrical installation” or part of the “electrical installation”; it could be anywhere within the customer’s wiring and equipment and need not relate to different load or generation points within the premises. The definition should refer to identifiable points at which energy metering and financial settlement occur.

Other proposed definitions also contain weaknesses. For example, the insertion to the definition of “load” uses different concepts (‘electricity’ rather than ‘electrical power’, ‘supply’ rather than ‘deliver’) but also a different drafting convention. However, UE does not dwell upon these drafting matters, other than to point out that they require attention, as we expect there will be a draft Rule upon which detailed drafting submissions can be made.

Otherwise, UE agrees with the broad thrust of the AEMO proposal that the provisions of the Rules that deal with metering and financial settlement (chapters 2, 3 and 7) require review and amendment.

However, the proposed amendments to 3.15.3(b), 3.15.5 and 3.15.5A seem unnecessary as they are related to transmission networks. Moreover, we are concerned that the proposed amendments to clause 7.7(a)(1) go further than is necessary and do not provide appropriate constraints on access to data – the concept of an “other interest” is too broad; if a retailer is to have access to data for a settlements point for which it is not the FRMP those circumstances need to be set out with some particularity.

AEMO provides some commentary, without specific proposals, in relation to the drafting around distribution charges. UE simply wishes to record that any drafting changes will need to reflect the determined policy outcomes, in relation to which UE made submissions above.

Customer classification

The Consultation Paper notes that all residential customers are considered small and enjoy the customer protections afforded by NECF. The rule change request suggests that it is important that customer thresholds are well managed so that customer protections are not reduced and then goes on to suggest that the loads across all settlement points need to be aggregated for the purpose of defining the correct customer threshold for business customers so that they can enjoy less customer protections. Correct allocation of thresholds provides retailer more contracting flexibility.

If business customers formed about 10% of the NEM by count, then this issue pertains to the accuracy of those customers near the small market contract and the small / large threshold which might be say 1% of the business customers.

Relationship between DNSPs, customers and retailers

UE’s view is that the relationship between distributor and customer and set out in Part 4 of the NERR should not be disturbed by the prospect of multiple retailers and settlement points. The relationship between distributor and customer is focussed on rights and obligations at the connection point. These rights and obligations have only recently been settled in the NECF arrangements and should not be destabilised by the MTR proposal.

The provisions of Part 5 will need to reflect not one but multiple retailers.

AEMO make it clear that the customer is responsible for the distribution within their network and for abiding by all laws.

The issue does not arise where there are two separate connection points.

These arrangements should only be established where there is a daily read interval meter allowing flexibility for individual retailer billing cycles and provision of all data needed for subtractive metering on a daily basis.

10. De-energisation and disconnection arrangements

The model assumes the same customer for each settlement point, so disconnection for non-payment or maintenance at one NMI would impact the same customer and another retailer. This is not unreasonable as the customer created this complex configuration and would hopefully understand the implications when they established the arrangement. This would be an issue for subtractive metering and possibly the net meter or multi-element meter example. If the two connection points have separate fusing this will not be an issue.

The exempt seller model for solar has been increasing. It would appear that the sub metering for solar leasing arrangements has not been deterred by disconnection at the connection point NMI.

11. Life Support

UE is of the view that each connection point should be separately fused and electrically isolated. This is a far easier way of managing life support with the existing notifications. There is already a heightened risk of inadvertent life support disconnection during a competitive roll out which has a significant mandated component and with a onestep check for remote de-energisation services.

Where multi-element metering, subtractive metering etc. are utilised AEMO's proposal for notifying all retailers at the settlement points and the distributor seems reasonable. This means that the second retailer for the pool pump for example, would not be able to disconnect for non-payment.

12. Standing offer and deemed customer arrangements

In our response on question 8, UE has highlighted the complexity of network billing in several options. Retailers should have to provide standing offers at a connection point (i.e. where the settlement point and connection point are 1 to 1). Where customers seek retail competition at disaggregated load levels, retailers should not have standing offer obligations for these bespoke arrangements. UE recognise that this may limit retailer choices for a small percentage of customers who have created these more complex configurations, however this does give retailers some choice as to which market segments they wish to pursue and is an opportunity to contain increased costs for minimal benefit.

13. Implementation

The Consultation Paper recognises that if this rule were to proceed it might be implemented with the Demand Response Mechanism (DRM). As implied in the Consultation Paper and supported by UE, if this rule did proceed, it will not be implemented in stage 1 with metering competition. If it proceeded with Metering Competition it would be too complex and serve to delay implementation of metering competition.

UE note the pages of proposed NER changes in the AEMO proposal and also the pages of possible jurisdictional rules changes required. There is a substantive body of work to clarify these requirements in the NERR and in Victoria to provide a clear set of roles and responsibilities on which to build processes. If this rule did progress, this work should only commence after all the requirements are locked down for metering competition, upgraded B2B and embedded networks and the consequential procedure and code changes etc. completed across the NEM.

The AEMC notes that the NERL would need to be amended to change the ROLR provisions from connection point to settlement point. This is likely to have a significant lead time once a decision to make the rule is made. Substantive work and expenditure should not be required until there is a clear decision to proceed, the NERL has been amended and there is a programme plan which includes the timeframes for all the jurisdictional amendments.

Implementation with the Demand Response Mechanism may offer some synergies as the complexity of the MTR meter data arrangements and the complexity of multiple data sets for a NMI for the DRM would both result in the opening of AEMO and B2B procedures.

The rule change request is suggesting that the market should be left to evolve and is vague at best how the connection point, settlement point arrangement will be managed and the specific configuration identifiable. Proposals to take connection point NMI standing data and replicate to the settlement point NMIs will not assist with identification of the exact configuration nor the network billing arrangements at each NMI. Despite the fact that AEMO has not proposed a primary and secondary NMI concept, if the proposal of splitting out network tariffs in some manner prevails then it will need to be clear in standing data how this works. If many models are allowed to operate there will need to be a clear naming convention for CATS so retailers are aware when quoting customers.