

11 September 2015

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Electronic Lodgement – ERC0181

Dear Ms Mayes

RE: Consultation Paper – Multiple Trading Relationships Rule

AusNet Services appreciates the opportunity to respond on the Consultation Paper – Multiple Trading Relationships Rule 2015.

AEMO has requested a Rule change request designed to facilitate multiple trading relationships (MTR) at a single site.

AusNet Services recognises the large-scale changes that are emerging or are being forecast for the way customers are using and accessing electricity, and that the intent of the MTR proposal is to facilitate further innovation and competition. However, we consider the case for developing MTR is not yet justified.

In our response, we have sought to identify the significant cost drivers and issues involved in implementing MTR, and considered the relative merits involved and the arrangements that would promote the most efficient outcomes for consumers and industry. Our submission presents these relative benefits and costs associated with each MTR arrangement in three tables.

We consider that all of the arrangements canvassed in the Consultation paper have significant costs implications, including if AEMO's proposed Rule change is not adopted and retail customers established additional connection points. The costs associated with this mandated change to introduce MTR would be material and would impact the non-discretionary prices for every customer.

Further, the ability for the industry to implement and leverage MTR is highly reliant on a workable metering contestability framework for providing retail customers with access to remotely read interval metering and a choice of metering providers. With the metering contestability Rule change effective in December 2017 it seems premature to proceed with MTR. On the basis of these costs, issues and the lack of viable alternatives, we recommend delaying the implementation of MTR Rule changes until at least the end of 2019.

AusNet Services welcomes the opportunity to participate in this Rule change development and looks forward to the opportunity to provide further input to the next stage of Consultation.

The matters addressed in this submission include areas of considerable complexity and detail. Should you have any comments or questions in relation to this response please do not hesitate to contact Justin Betlehem on 03 9695 6288 or Peter Ellis on 03 9695 6629.



Sincerely,

A handwritten signature in black ink, appearing to read "Katie Yates", written in a cursive style.

Katie Yates
(Acting) Regulatory Frameworks Manager
AusNet Services

Multiple Trading Relationships

Response to Consultation paper

Submission to the AEMC on MTR Rule Change Consultation Paper

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1 Assessing the appropriate timing for introducing Multiple Trading Relationships

1.1 Market conditions, lack of information and cost benefit

AusNet Services recognises the large scale changes that are emerging or are being forecast for the way customers are using and accessing electricity. As such we seek to ensure network businesses and the broader industry has the capability to support electric vehicles (EVs) and other innovative demand management products and services. As such we support efforts to understand what industry outcomes and potential Rules changes may be required to facilitate such new services. However, at this stage, we do not see a need to introduce Multiple Trading Relationships (MTR). The changes required would result in high costs to industry processes and systems. For the following reasons, the benefits of implementing MTR are not expected to exceed the costs in the near term:

- 1) current and short to medium term forecasts for volumes of EVs, solar and batteries, and air-conditioning controls, and of the associated aggregation and control of these loads, do not yet justify the change¹;
- 2) the size and sophistication of the demand management market does not yet provide a basis for supporting the MTR take up envisaged by SKM Jacobs; and
- 3) the lack of a clear cost benefit case by SKM Jacobs with the potential for high costs of between \$450 million to \$1 billion to be smeared across all retail customers in support of a few niche products.

We recommend a delay in establishing MTR framework to the end of 2019 will allow policy makers and regulators to refine the future regulatory framework and incorporate learnings from aggregated controlled load developments including from the California Public Utilities Commission (CPUC) plug-in Electric Vehicle (EV) sub-metering trial. Although the introduction of direct subsidies has the potential to increase the take up of EVs, policy makers have not provided an indication of pursuing such measures². This has the potential to better inform the development of the most efficient regulatory (and physical) arrangements to support these emerging markets.

Question 1 Previous projects and changed market environment

- 1) Have changes in market conditions or new information since these projects were completed affected the potential benefits and costs of MTR?
- 2) Are there additional costs and / or benefits associated with MTR that were not identified or assessed by Jacobs SKM in its analysis?

Response to question 1

- 1) AusNet Services considers there have been no material changes in market conditions in relation to new services since the work done by AEMO including the Jacobs SKM costs and benefits analysis. Although the CPUC plug-in EV sub-metering trial is commencing, it will likely be at least a few years before adequate information is available to inform and be a clear driver for the development of Rule changes and associated industry costs in support of MTR.
- 2) We consider the Jacobs SKM analysis over-estimates the take-up of the various MTR arrangements and under-estimates the industry costs associated with implementing some of the more complex MTR arrangements. Although the analysis does not recognise the lower customer costs resulting from reduced electrical work at the customer premises related to options not requiring fully duplicated

¹ Jacobs SKM benefit case assumed a MTR take-up of 7% in 2020 and 18% in 2030, given the very low take-up of time-of-use pricing in Victoria this seems unlikely

² Energeia, Prepared by Energeia for the Energy Supply Association of Australia, *Review of Alternative Fuel Vehicle Policy Targets for Australia*, July 215

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metering, we consider this will not be a material impact on the bottom line costs. Until there is new evidence of improved take-up of new services it would be difficult to justify implementing MTR.

1.2 Impact of Metering Contestability is uncertain

AusNet Services positions with respect to these aspects of the framework are given in the answers below:

Question 2 Assessment framework

1) Are there any other issues that should be considered in the Commission's assessment of AEMO's rule change request?

Response to question 2

1) An important issue relevant to the assessment of the MTR Rule change is uncertainty associated with the Expanding Competition in Metering and Related Services Rule change. Without a workable metering contestability framework, and an established and effective industry contestable metering capability for providing retail customers with access to remotely read interval metering and a choice of metering providers, the access to MTR and associated new services would be greatly limited. Further, until metering contestability operational arrangements are firmly established, it would be difficult to define MTR to best utilize interval metering and contestable metering providers. Without remote load switching capability, the value of aggregating demand response load and "selling" this in the market is limited and hence the broad benefits are restricted. On this basis AusNet Services recommends delaying the implementation of MTR Rule changes effective date until the end of 2019.

1.3 KPMG New Energy Services Report

AusNet Services has reviewed KPMG's report on New Energy Services and MTR and provided our response below.

Question 3

1) Does KPMG's analysis represent a reasonable summary of the services that may be facilitated by MTR? Are there any other services that may be facilitated by MTR?

2) Would these new services be more effectively enabled by AEMO's proposed MTR framework than under current arrangements which require a second connection to the distribution network? Would AEMO's proposed MTR framework better enable customers to capture the value associated with the demand response, as opposed to current arrangements?

Response to question 3

1) AusNet Services considers the services identified in KPMG's analysis represent a comprehensive listing of every new service, although not every new service is compatible with our current regulatory framework with or without MTR, for example peer-to-peer services. We agree with KPMG's assessment that "complete charging packages for electric vehicles" are reliant on the ability of retail customer to trade with multiple retailers. We consider providers may seek to bundle the cost of the EV, charging station, battery storage, solar panels, servicing, insurance and electricity supply together.

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2) We consider that either the proposed MTR arrangement or a second connection point arrangement have the potential to help enable some of these new services. However, we consider that demand response is not reliant on the establishment of MTR or even a second connection point and hence the potential benefits which accrue to having the MTR capability in place are difficult to separate from those broader demand response customer benefits.

Question 4

- 1) Does KPMG's analysis effectively describe the ability of these different energy services to capture efficiency benefits along the supply chain?
- 2) Do the current arrangements raise coordination and split incentive issues? If so, to what extent would AEMO's proposed MTR framework allow service providers to address such coordination and split incentive problems?

Response to question 4

AusNet Services has not attempted to address question 4.

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2 Suitability of MTR arrangements

2.1 Customer cost reductions

2.1.1 Arrangements for additional connection points

The addition of a second connection point for a retail customer is not current practice for AusNet Services, but from time to time we get applications for additional connection points for the same premises. In this rare case, the new connections B2B Service Orders procedure does not provide an indication whether the request is an additional request for the same retailer customer. These applications are approved on the basis of exception in the following circumstances:

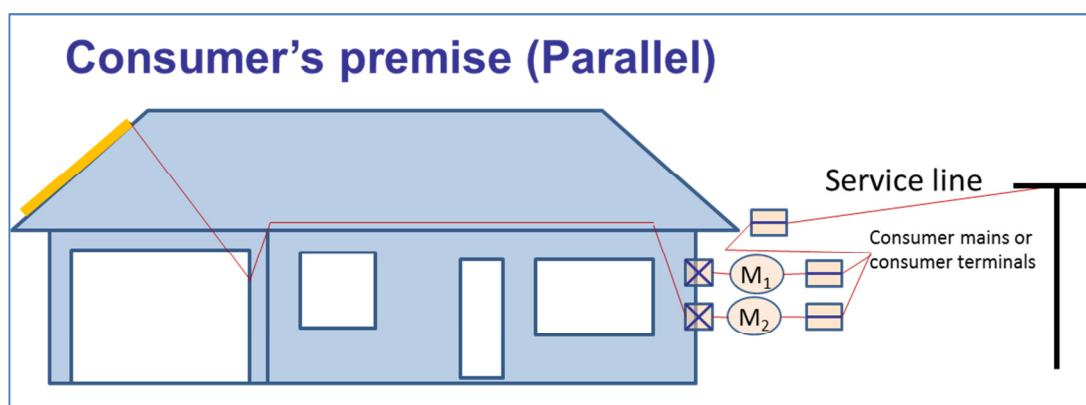
- 1) Granny flat configuration where the occupant is presumably a different retail customer;
- 2) A factory with high loads with strict wiring safety requirements; or
- 3) Rural properties where buildings are separated by large distances in the order of 500 meters or more, due to safety requirements. This is the only situation that justifies a separate physical service to the property.

We largely agree with the Energeia's assessment in concluding that wiring arrangements for a retail customer with an additional connection would in principle be no different to a granny flat connection.

The Victorian Service Installation Rules (SIRs) approach with respect to multiple connection points at what is essentially the same supply address is largely driven by earthing and isolation arrangements and safety issues associated with multiple earths. Hence the SIRs requires the metering for the two or more connections points to be co-located on the same metering panel or adjacent to it and share the same earthing point. The SIRs prevents a second service line connecting to the same premises for safety and earthing reasons because there is insufficient separation to prevent interaction.

Additionally a detailed review of the Victorian SIRs by the SIRs Committee, including the involvement of Energy Safe Victoria (ESV), would be necessary for the full framework for the more routine establishment of multiple connection points within a single premises to be validated and if necessary specifically drafted into the SIRs.

The requirements applicable to group panels and associated earthing and isolation would then apply. As Energeia identified, there may be requirements to upgrade the metering panel, switchboards and supply associated with this additional connection point or parallel MTR arrangement. Also, we agree with Energeia's analysis that if the addition of a new load exceeded the capacity of the existing service line, meter, fusing and service line these would need to be upgraded as well.



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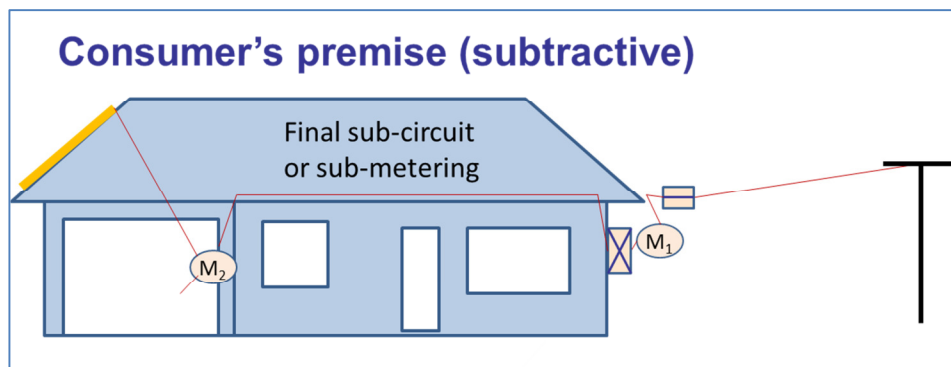
2.1.2 Cost savings from subtractive metering arrangements

The establishment of sub-metering within the premises of a retail customer is also not common practice for network businesses. Both the AER's NSP exemption guideline and Victorian General Exemption Order do not envisage a retail customer at a single premises becoming what is essentially an embedded network. However, sub-metering is established in the following situations.

- 1) Embedded networks where one customer on-sells energy to other retail customers.
- 2) Off-market metering for exempt selling of energy generated from solar panels.

If supportive arrangements for single retail customer embedded networks are established as part of MTR then customers could utilise this wiring arrangement to reduce their costs. This cost reduction is associated with avoiding likely need to replace or upgrade metering panels and associated earthing and isolation. In most instances, the establishment of subtractive metering arrangements will be less costly for the customer in terms of electrical work in comparison to the equivalent parallel metering option, especially if the seller of "complete charging packages for electric vehicles" includes compliant sub-metering equipment on the charging appliance.

Again this installation approach is not inconsistent with the Victorian SIRs. However it is not specifically recognised in the SIRs and review of the Victorian SIRs by the SIRs Committee, including the involvement of ESV, would be necessary for the full framework for the more routine establishment of a subtractive metering arrangement within a single premises to be validated and if necessary specifically drafted into the SIRs.



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2.1.3 Comparative analysis of customer costs and cost reductions

The customers' costs of establishing a MTR depend on the metering arrangement applicable. The Consultation paper suggests MTR arrangements associative with additional connection points in parallel (and presumably subtractive) are available without any NER changes. However AEMO's NER change request and the AEMC Consultation Paper put on the table a range of MTR arrangements and accordingly, our response to the Consultation paper considers the six possible outcomes below.

Table 1: Costs of MTR arrangements to customers

MTR Arrangement	Customer cost	Customer cost reduction
1. Additional connection point (suggested Chapter 6 interpretation)³	Additional connection charge, meter, meter board work, and premise wiring.	Potentially avoids part of the network tariff fixed component for extra connection points depending on the DNSP tariff proposal and AER response.
2. Parallel metering	Additional connection charge, meter, meter board work, and premise wiring.	As drafted avoids the entire network tariff Network Uses of System (NUOS) fixed component for extra settlement points.
3. Net metering	Additional connection charge, meter, meter board work, and premise wiring. Contestable metering only. Note the customer costs for these three arrangements are largely the same for any particular premises.	As drafted avoids the entire network tariff NUOS fixed component for extra settlement points.
4. Subtractive metering Embedded Network within the premises of a retail customer. Retailers and AEMO receive raw data from MDPs.	Additional meter and some premise wiring. Retailer incurs higher costs to process billing data (potentially passes to customer or smears cost to other customers). Retailer potentially could charge lost opportunity costs of the subtractive load to the customer. ⁴	Avoiding changes to the meter panel in most cases and lesser premise wiring costs compared with these costs for arrangements 1 to 3.
5. Subtractive metering MC/MDP subtracting meter data before issuing to market.	Additional meter and some premise wiring. Customer directly engages MC for all metering on a premises, and meet MC charge for this service.	Avoiding changes to the meter panel in most cases and lesser premise wiring costs compared with these costs for arrangements 1 to 3.
6. Multi-element metering	Premise wiring, and changing to a multi-element meter. Customer directly engages MC for all metering on a premises.	Avoids the entire network tariff fixed component. Potential metering charges may be less.

³ Based on the suggestion in section 4.3.2 of the Consultation paper that the current Rules allow this to occur, our submission addresses this suggestion in section 2.4.

⁴ This MTR arrangement requires the customer to pay for network tariff charges for the total consumption measured at the upstream metering and for non-network tariff charges for the subtracted energy (that is settled energy in MSATS).

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Question 5 Impacts on customers of enabling MTR

- 1) Are the costs associated with establishing a *second connection* point likely to deter customers, particularly small customers, from engaging with multiple FRMPs at a premises?
- 2) Would AEMO's proposed MTR framework significantly reduce direct costs for customers who want to engage with multiple FRMPs? Could AEMO's proposed MTR framework deliver any other direct cost savings for consumers?
- 3) Are the direct costs of engaging with multiple FRMPs at a premises markedly different for small and large customers under current arrangements? Would AEMO's proposed MTR framework have a more significant impact for small customers than for large customers?

Response to question 5

1) The costs of establishing a second connection point as a non-MTR arrangement comprise of the costs to install a second meter on the meter panel (or adjacent metering panel) forming a safe group-metering panel and associated wiring and fusing. Also the second connection point attracts a full second Network Tariff charge, in the same way an additional connection to a new retail customer in an apartment complex attracts a full Network Tariff. This is not unreasonable as these connection points introduce an assumed capacity increase on the network, a second retailer relationship to manage, and creates additional operational costs.

Establishing a second connection utilising a subtractive arrangement may be possible under the exemption framework and could reduce wiring costs, but in this situation the retail customer would be subject to additional retailer charges to support the more complex billing arrangement and to reflect the primary retailer's lost opportunity costs.

2) AusNet Services considers AEMO's parallel MTR arrangement imposes same costs to the customer with respect to the physical arrangements of establishing a second connection point, minus the fixed NUOS charges for the second connection point under the proposed AEMO model.

The subtractive MTR arrangement would most likely save the retail customer with wiring cost reductions, but the subtractive metering arrangement could be handled in one of two ways which would impact meter data costs:

(a) Like an embedded network with the retail customer subject to additional retailer charges to support the more complex billing arrangement and to reflect the primary retailer's lost opportunity costs, and with settlement through the AEMO MSATS embedded network handling capability; or

(b) Similar to a virtual NMI for the transmission network, with the metering data provided to all parties (Retailers, AEMO and DNSP) being subtracted before it is provided. The retailer for the primary NMI would only receive and bill the retail customer for the net consumption, and the retailers for the secondary NMIs would bill customer and pay for network tariff charges for their sub-metered consumption. This arrangement makes the settlement points financially independent and avoids additional retailer costs, but requires the customer to directly engage a contestable metering coordinator.

Finally, the multi-element metering MTR arrangement requires a more expensive meter and complex metering data management using a contestable metering coordinator. Apart from being very costly to the industry, the metering and meter data processing costs and associated wiring certainly don't make this the most cost effective option for the retail customer.

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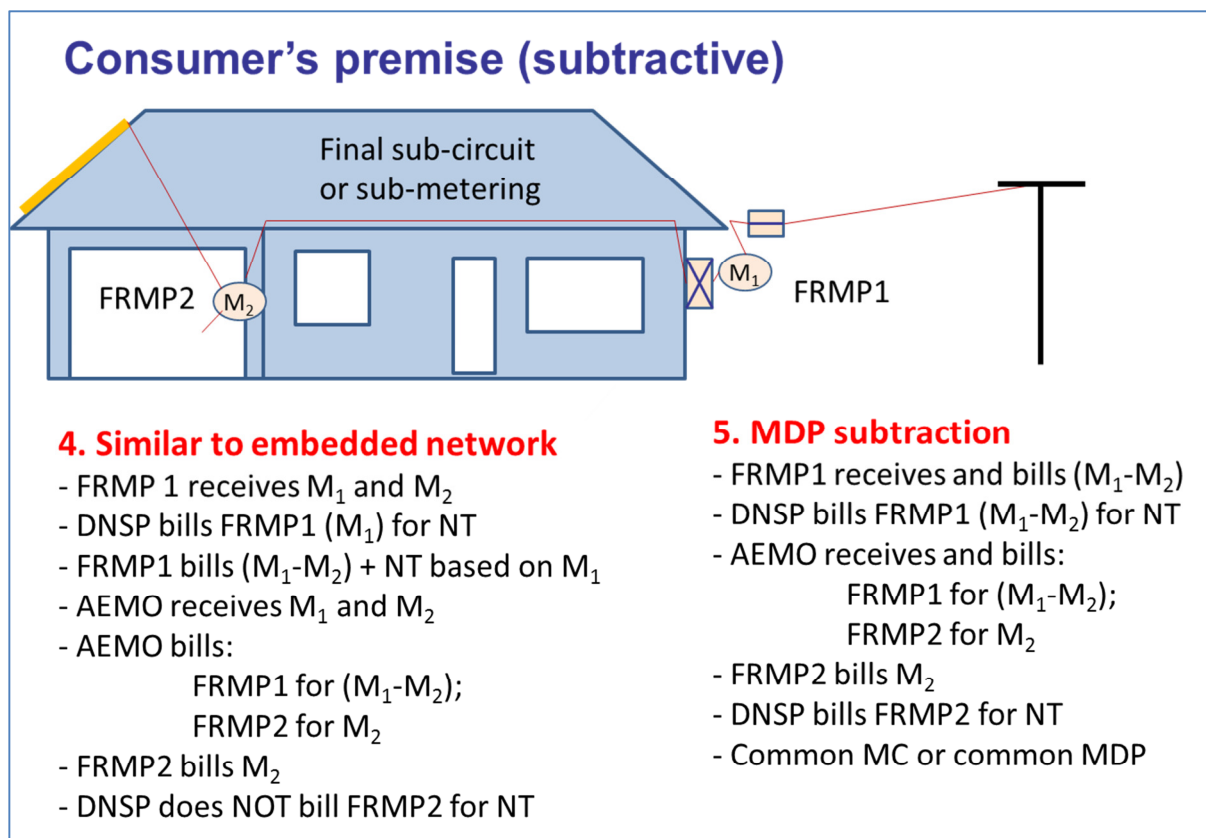
3) We suggest the volume of energy supplied to a large customer would make any establishment costs for MTR immaterial in comparison to the cost of electricity supply. Only the second subtractive MTR arrangement has the potential to be a lower cost than the parallel MTR metering arrangement for a small customer.

2.2 Costs to the industry of implementing MTR

The impact on the industry largely depends on the MTR arrangement applicable. However we note all the MTR arrangements proposed introduce the need for identifying additional connection points otherwise retailers would churn the wrong connection points (or settlement point) during retail transfer. AusNet Services has considered the cost implications, and impacts for the seven possible MTR arrangements below.

In our considerations we have identified there are two potential subtractive MTR arrangements as shown in the diagram below. Although arrangement 5 would require the customer to appoint a common Metering Coordinator (MC)/Metering Data Providers (MDP) it does enable the retail customer to maintain independent retailer connection agreements and to benefit from lower electrical costs at the premises.

These cost implications are presented in Table 2 on the next page.



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Table 2: Costs of MTR arrangements to DNSPs and other industry costs (AEMO and Retailers)

MTR Arrangement	Network business costs	Other industry costs
1. Additional connection point (suggested Chapter 6 interpretation)⁵	High Billing the fixed network tariff NUOS component would require cross referencing NMI. Potentially billing capacity network tariff could require adding demand across NMIs and apportioning between FRMPs. Life support management would require cross referencing NMIs.	There may be a need to specifically identify these sites through a NMI Standing Data and B2B field other than in the LocationDescriptor field to prevent retailers from churning the wrong connection point.
2. Parallel metering	High Life support management would require cross referencing NMIs. Billing the fixed network tariff NUOS component would require cross referencing NMIs. Potentially billing capacity network tariff could require adding demand across NMIs and apportioning between FRMPs.	There may be a need to specifically identify these sites through a NMI Standing Data field and B2B other than in the LocationDescriptor field to prevent retailers from churning the wrong settlement point.
3. Net metering	High Life support management would require cross referencing NMIs. Billing the fixed the network tariff component would require cross referencing NMIs. New network tariffs and changes to GSL reporting.	There would need to identify these sites in NMI Standing Data and B2B fields to prevent retailers from churning the wrong settlement point. Complex outage and de-energisation management arrangements.
4. Subtractive metering Embedded Network within the premises of a retail customer. Retailers and AEMO receive raw data from MDPs.	Low Current systems and processes support this. The contestable Embedded Network Manager (ENM) could perform new connection and manage life support obligations. However, there may be a need to identify sub-metering sites in NMI Standing Data.	More complex billing for the primary FRMP. AEMO needs to register individual retail customers as embedded networks.
5. Subtractive metering⁶ MC/MDP subtracting meter data before issuing it to market.	Low-Medium-High New Network Tariffs for sub-metering sites and changes to GSL reporting. There would need to identify sub-metering sites in NMI Standing Data and B2B fields. If customer for sub-metering can register life support, then need to cross reference NMIs and increase the cost from low to medium. Potentially billing capacity network tariff could require adding demand across NMIs and apportioning between FRMPs, increasing this cost to high.	Low There would need to identify sub-metering sites in NMI Standing Data and B2B fields to prevent retailers from churning the wrong settlement point.
6. Multi-element metering Although a MC/MDP could use multi-element metering for the above arrangements the AEMO proposal does not envisage this).	Very high – even if provided through contestable metering coordinators the structural changes to the market arrangements would result in extensive changes to metering system, customer information system and billing system.	Very high – AEMO to change the structure of MSATS metering data and NEM12 metering data file formats. Every metering, customer information and billing system would require extensive changes.

⁵ Based on the suggestion in section 4.3.2 of the Consultation paper that the current Rules allow a single retail customer to appoint multiple connection points and not be subject to the multiple NUOS fixed charges.

⁶ Refer the diagram above for more detail of the subtractive data/billing arrangements

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Question 6 Impacts on AEMO and market participants of enabling MTR

- 1) What costs would retailers, DNSPs and AEMO face in adapting their systems to implement AEMO's proposed MTR framework?
- 2) Could these adaptation costs be reduced through a staged implementation process?
- 3) Could these adaptation costs be reduced by implementing at the same time as any other projects? What other projects might present opportunities for joint implementation?

Response to question 6

1) AusNet Services considers the costs of implementing any of the four MTR arrangements proposed by the Rules and the suggested additional connection point arrangement are best summarised in Table 2 above. It must be highlighted that AEMO's Rule change request suggestion to change the Rules and leave the development of retail market procedures to market forces would actually require network businesses to change systems to support all arrangements prior to the effective date.

2 & 3) Given the largely structural and unique nature of the large costs associated with MTR we consider the adaptation costs are unlikely to be reduced by a staged implementation. However we consider that there may be some implementation cost synergies by combining MTR's effective date with the Demand Response Mechanism initiative.

2.3 Metering arrangements

The impact on the industry depends on the MTR arrangement applicable. We have sought to highlight these impacts in Tables 2 above and Table 3 in section 3 below.

Question 7 Metering arrangements

- 1) What issues could arise for Metering Coordinators as a result of MTR? What issues arise for MTR as a result of the role of Metering Coordinators?
- 2) Should only financially responsible market participants be able to engage with customers through MTR arrangements? If not, what other parties should be allowed to engage through MTR and what benefits would this provide to consumers? What are the implications for the AER's exempt selling guidelines?
- 3) Could multi-element meters support MTR at a lower cost to consumers than other metering configurations? Are there limits or barriers to stop Metering Coordinators installing meters?
- 4) Can multi-element meters be supported by existing AEMO and participant IT and settlement systems? Would a requirement on AEMO and participants to support multi-element meters create costs for participants? What is the extent of these costs?

Response to question 7

1) Until the operational arrangements for metering contestability are firmly established it is difficult to foresee issues that may arise for Metering Coordinators (MC). We consider the FRMP may see the MTR establishment as a lost opportunity cost and seek to leverage the "primary" FRMP's commercial

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appointment of a MC for a subtractive, net or multi-element metering arrangement to prevent the small customers from having their desired metering arrangements and splitting their load. Accordingly the AEMC would need to consider how to avoid this situation. We suggest this could involve rights for small customers seeking MTR supported by these metering arrangements to appoint a MC directly, or mandate the splitting out of the network bill component from the customer's bill.

2) Any consideration of allowing authorisation exempt retailers to become FRMPs for MTR connection points raises a number of customer protection issues which would need to be dealt with through the framework.

3 & 4) We consider the MTR supported by the multi-element metering proposed by the AEMO Rule change request would require extensive changes to AEMO and participant IT systems. The costs associated with this mandated change would be material and would impact non-discretionary prices for every customer. However, potentially multi-element metering could be used by a contestable MC as a substitute to multiple meters registering each virtual NMI and meter within MSATS. As is the case sometimes with transmission metering, but this is expensive and each arrangement is individually approved by AEMO. This would substantially reduce the need for extensive changes to AEMO and participant IT systems, although some DNSP systems look for instances of identical meter numbers as an indication of transposed metering.

A key assumption with any MTR supported by the multi-element metering arrangement is that the MC must be appointed directly by the customer, or a single MC is assigned under a regulated approach similar to multiple NMI metering installations.

2.4 Network Tariff considerations

All the MTR arrangements identified in the Consultation paper retain the current billing framework of the FRMP paying for wholesale market costs for settlement points (or connection points for the same retail customer) and the customer paying each retailer for the supply of electricity.

However the network tariff charging and billing arrangements are somewhat more complex and subject to a range of considerations. Networks businesses charge consistent network tariffs for sites with broadly the same physical connection characteristics. This requirement is established through the requirements in the Rules and implemented through the AER Tariff Principles. Network tariffs include DUOS, TUOS, metering charges (where applicable), pass through amounts and jurisdictional feed in tariff schemes, while NUOS excludes the metering charges.

We suggest this would not preclude, but rather fundamentally supports, the charging of a network tariff to a retailer for consumption or demand at settlement points. In the case of a retail customer with multiple connection points, notionally these network tariff arrangements will be no different to those tariffs that apply currently to retail customers residing in apartment buildings (with homogeneous connection characteristics), where the same network tariff NUOS applies to each retail customer - no matter how many connection points there are.

The Consultation paper appears to take a different interpretation in suggesting that the current NER does not prevent a single retail customer from being charged an efficient price for establishing a second connection point. It is unclear exactly what this means raising a number of questions:

- 1) Does the fixed network tariff NUOS component get split evenly per connection point (or settlement point) or assigned to one FRMP or assigned to each FRMP as is currently the practice?
- 2) Is the same fixed network tariff component charged irrespective of the number of addition connection points (or settlement point)?
- 3) Does billing demand apply across every connection point (or settlement point) for the one retail customer?

We consider the fixed network tariff NUOS component is integral for recovering the residual costs of the network business. Consequently the complexity of changing our NUOS billing arrangement would necessitate the cross-referencing of connection points (or settlement points).

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The network tariff charging arrangements not only affect network businesses, they also have implications on retailer systems in reconciling network charges. In particular, we would expect outcomes that did not require combining demand across NMIs for a retail customer, on the basis that the cost implications for the industry would greatly exceed the customer benefits of sharing demand. As such, it would be reasonable to calculate demand for each settlement point or connection point.

Question 8 Network charges and network support payments

- 1) If a customer establishes a second connection point at a premises, will that customer face inefficient fixed DUOS charges? Will this issue be addressed by the new network pricing objective and pricing principles?
- 2) Would the allocation of capacity or demand based charges present particular challenges where multiple FRMPs are present at a premises?
- 3) Would MTR require changes to the frameworks for the billing of network charges and for credit support?

Response to question 8

1) AusNet Services considers that a retail customer establishing a second connection point creates additional costs to the DNSP over and above the cost for a retail customer with single connection point. These costs reflect the need to support minimum network capacity per connection point design and augmentation assumptions, and the need to cover additional operational and IT costs that are established on a per customer basis.

If the interpretation of the Rules was to treat retail customers with multiple connection points the same as retail customers with the one connection point, then fixed network tariff NUOS charges could be determined. However, the applicable network tariff would be based on a separate *tariff class* established due to the different nature of the physical connection to the network, in accordance with NER 6.18.4(a)(1)(ii). The network tariff NUOS applied may not be very different to NUOS charges that would otherwise be currently applied multiple connection points for different retail customers, similar to residents in an apartment building.

Although we do not recommend it, the Commission could achieve this by adding a provision to NER 6.18.4 (a) similar to provision 6.18.4(a)(3), which relates to micro-generation, then the network tariff charges could indeed be established to treat a retail customer with multiple connection points no different to a retail customer with a single connection point. However, as explained earlier the requirement to manage different allocations of fixed network tariff charges across multiple connection points (or NMIs) would result in high implementation costs for Distribution Businesses (DBs).

2) If the interpretation of the Rules was to treat retail customers with multiple connection points no different than a retail customer with a single connection point, then any applicable maximum demand DUOS component of a network tariff may need to be considered as an aggregated and then re-allocated across connection points based on the relative contribution to this maximum demand. The requirement to do this would result in very high costs to change network billing systems within every DB.

3) AusNet Services considers that MTR changes to the framework will not impact billing arrangements for network tariffs or credit support requirements provided that MTR does not change the retail customer or increase the financial risk of the DB by diminishing current credit support requirements.

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2.5 Suitability of proposed NER changes

AusNet Services positions with respect to these aspects of the framework are given in the answers below:

Question 9 Definition changes, market registration and market rules

- 1) Are the changes proposed by AEMO to Chapters 2, 3 and 10 of the NER sufficient to enable AEMO's proposed MTR framework?
- 2) Are AEMO's proposed substitutions of settlement point for connection point appropriate in each instance?

Response to question 9

1 & 2) Although we consider the proposed NER changes are largely sufficient to establish a MTR arrangement, it does not adequately describe how MTR would operate under different arrangements. As such we note the following issues with the proposed drafting and proposed substitution of settlement points:

- a) Changes to clauses 3.15.5 and 3.15.5A are unnecessary because they apply to transmission virtual metering. Surely a MTR is not required to handle transmission metering.
- b) Section 3.15 of the NER would be the appropriate section to define the settlement framework for MTR supported by subtractive, net and multi-element settlement points. If MTR proceeds, we recommend that subtractive MTR arrangement are defined here, rather than leaving the definition of critical settlement outcomes to the retail market procedures.
- c) We consider changes to clause 7.3.1(e) are unnecessary as they are incompatible with the intent of the changes associated with the Embedded Network Rule change request where by AEMO allocates unique NMIs for the Embedded Network Manager to allocate within an embedded network. Further we do not consider that any special Rules provisions are required for MTR arrangements to be established within embedded networks.
- c) We consider that the definition of settlement point should refer to "the electrical installation into or from which electricity is supplied in relation to a connection point, or any separate part of that electrical installation".

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3 Supporting Regulatory and Customer Protection Framework

AusNet Services agrees there are a number of regulatory and customer protection issues associated with AEMO's Rule change request and the alternative proposal of retail customers establishing two connection points. In addition to providing answers to the questions we have sought to provide a summary table to highlight the relative impact on different MTR arrangements.

Table 3: associated issues connection, life support and standing offer suitability with MTR arrangements

MTR Arrangement	De-energisation, disconnection and outage arrangements	Life support arrangements	Support for Standing Offer
1. Additional connection point	Each connection point is independently connected; although the occupants may not be aware of which part of their installation is supplied electricity by which connection point.	Risk of customer registering life support (LS) to the wrong connection point. Only mitigating by cross-referencing LS information across multiple NMIs.	Supported if each connection point is independent
2. Parallel metering	Each connection point is independently connected; although the occupants may not be aware of which part of their installation is supplied electricity by which settlement point.	Risk of customer registering LS to the wrong settlement point. Only mitigating by cross-referencing LS information across multiple NMIs.	Supported if each settlement point is independent.
3. Net metering	Both settlements points share the one supply. Hence the supply arrangements for both settlement points retain the need for regulatory customer protections.	Greater risk of the customer not registering LS for both settlement points and either FRMP de-energising the site. Only mitigating by cross-referencing LS information across multiple NMIs.	Arrangement not envisaged by the deemed contract or standing offers.
4. Subtractive metering Embedded Network within the premise of a retail customer. Retailers and AEMO receive raw data from MDPs.	Consumer protections are not required for disconnections and outages where discretionary subtractive metering settlement points have been added because the retail customer retains access to an alternative supply through the up-stream connection point.	Lesser risk of the customer connecting LS equipment into downstream settlement point. Mitigated through jurisdictional safety rules, or the contestable role of Embedded Network Manager cross-referencing LS information across multiple NMIs.	Standing offers do not envisage billing network charges and retail settlement component at different energy volumes.
5. Subtractive metering MC/MDP subtracting meter data before issuing to market.	Consumer protections are not required for disconnections and outages where discretionary subtractive metering settlement points have been added because the retail customer retains access to an alternative supply through the up-stream connection point.	Lesser risk of the customer connecting LS equipment into downstream settlement point. Mitigated through jurisdictional safety rules or by cross-referencing LS information across multiple NMIs.	Supported if each settlement point is independent, although the direct appointment of the MC complicates it.
6. Multi-element metering	All settlements points share the one supply. Hence the supply arrangements for all settlement points retain the need for regulatory customer protections.	Greater risk of the customer not registering LS for all settlement points and any FRMP de-energising the site. Only mitigating by cross-referencing LS information across multiple NMIs.	Arrangement not envisaged by the deemed contract or standing offers.

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3.1 Customer protection framework

AusNet Services considers MTR settlement points and connection points should be classified in a manner that allows retailers to operate independently of each other. As such each settlement point (or connection points) for the same retail customer must be separate from one another. We suggest it is on this basis that customers should be classified.

Question 10 Customer classification

- 1) Should customers be classified as large or small, residential or business, according to consumption at the level of the premises, or according to consumption at individual settlement points?
- 2) Should FRMPs have the ability to reclassify only the settlement points for which they have responsibility, or should they be able to reclassify an entire premises?
- 3) Would these issues be any different where a customer had established multiple trading relationships supported by a second connection point at its premises?

Response to question 10

1 & 2) AusNet Services considers that although each retail customer establishing a MTR arrangement would have a level of sophistication over and above most small customers, which might indicate that if the summated load across at all connection points qualifies as the customer as large that all settlement points should be so classified. However this appears to unnecessarily over-complicate the customer classification by not treating each FRMP's agreement with the retail customer independent from other FRMP agreements. Hence each settlement point should have its own customer classification based on the load at that settlement point.

3) We consider this is no different to a MTR arrangement supported by a second connection point.

Question 11 Relationship between DNSPs, customers and retailers

- 1) Will the current tripartite arrangements require adjustment to allow for multiple trading relationships?
- 2) Does this issue only arise under AEMO's proposed MTR framework, or also where a customer has established MTR supported by two connection points?
- 3) Are there any issues related to the coordination of billing cycles between multiple FRMPs at a premises that would need to be addressed in the NERR?

Response to question 11

1) AusNet Services considers that every MTR arrangement will still require the current tripartite arrangement to some extent. Subtractive MTR arrangements would diminish the DNSP's roles and responsibilities for sub-metering NMIs behind the upstream connection point, whilst the other MTR arrangements suit the current tripartite framework in manner that is no different to the tripartite framework for two separate customers.

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2) The MTR supported by two connection points, like the parallel MTR arrangement, would be entitled to the same services by the DNSP as two separate customers in an apartment building.

3) We consider the coordination of billing cycles between FRMPs not a requirement, although there may be situations where because of subtractive metering arrangement the FRMP needs the metering data from the downstream settlement points to bill the site on actual data. This is currently an issue for the retailers of embedded network parents where the reward typically justifies the risk of delayed billing. In the case of MTR we can suggest one solution where retail customer directly appoints a MC who reads all meters at the premises, so all meters are read with the same frequency and with a consistent reliability.

3.2 Disconnection, de-energisation and outage arrangements

We consider MTR the impact of disconnections, de-energisation and outages largely depends on the MTR arrangement in place, a summary of the impacts is presented in Table 3 above.

In particular, with the subtractive arrangements the same retail customer is in place for all settlement points (or connection points), so de-energisation for non-payment would impact the same customer and all retailers for downstream (sub-metering) NMI. This is not an unreasonable impact on the retail customer who established this complex supply configuration. A de-energisation for non-payment for a downstream NMI would not be overly adverse for the retail customer, who still retains supply to the rest of the premises. Both scenarios are suited to reducing the level of regulated customer protections (light regulation) that ensure a level of guaranteed supply and protections against unfair disconnections.

Conversely, the net and multi-element metering MTR arrangements have the settlement points sharing the same fusing and isolation equipment so one de-energisation will affect the whole site irrespective of which NMI is de-energised. Given this heightened level of vulnerability it is difficult to justify a reduction in the level of regulated customer protections for any settlement points for either the net or multi-element metering MTR arrangements.

Question 12 De-energisation and disconnection arrangements

- 1) Should DNSPs and FRMPs be able to de-energise a settlement point if this results in the subsequent de-energisation of a "downstream" settlement point?
- 2) How is the metering configuration adopted by a consumer relevant to disconnection issues? Do these issues arise only where a subtractive metering configuration is adopted?
- 3) Would the prospect of disconnection of a downstream settlement point deter potential new energy service providers from entering the market? Are additional safeguard mechanisms needed to deal with third party disconnection?

Response to question 12

- 1) We recommend that subtractive arrangements are only under a lightly regulatory arrangement with none of the consumer protection provisions associated with de-energisation and disconnections. The subsequent de-energisation of a downstream settlement point will affect the additional downstream appliances in the same way as all other appliances in the premises are affected.
- 2) We consider the subsequent de-energisation issue affects the subtractive, net and multi-element metering MTR arrangements. At least in the case of the subtractive MTR arrangement, there remains a single connection point that could retain the full set of customer protections.

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3) We consider that implementing a subtractive MTR presents an inherent risk of downstream settlement points being de-energised by the disconnection of the connection point. If the customer protection framework is lightly regulated and there is no regulated obligation to supply, then the new energy service provider has the advantage of operating with a lower regulatory burden to counterbalance the risk of an inadvertent outage due to the retailer customer being disconnected represents a fair commercial trade-off.

3.3 Life support

Currently DSNPs do not typically enable the establishment multiple connection points to a single premises, except potentially for granny flats, factories, and rural properties. In each case, we consider that each connection point is associated with a different retail customer. The new connection Service Order process does not explicitly identify whether retail customers are requesting a second connection point for an existing NMI registered to that same person. As such if a retail customer with two connection points had life support equipment he or she would have to register both connection points with life support or ensure that life support equipment is only electrically connected to the registered NMI. The current regulatory framework does not require the customer to do either of these things.

Therefore, we consider the establishment of MTR, irrespective of whether it is based on AEMO's Rules change request or through the establishment of additional connection points, increases the possibility of inadvertently disconnecting life support equipment. As summarised in Table 3, the extent of this risk and choice of mitigation does depend on the MTR metering arrangement. We consider the multi-element and net metering options having the highest risk profile because disconnecting one settlement always disconnects the other, while the subtractive metering arrangements have the lowest because the subtractive load would typically be located close to the metering (or could be regulated to do so).

Question 13 Life support equipment

- 1) How should the risk of disconnection of life support equipment be managed where an MTR arrangement is in place? Are the new requirements proposed by AEMO sufficient to manage this risk?
- 2) Are the risks of disconnection of life support equipment affected by the specific metering configuration used by a consumer to enable MTR? Would the risks of disconnection of life support equipment be any different where MTR was supported by a second connection point?

Response to question 13

1 & 2) We consider the risk of de-energising is inherent with any arrangement where a retail customer has multiple connection points (or settlement points), but we consider the risk could be mitigated by either cross-referencing connection points (or settlement points) proposed by AEMO, or by ensuring life support equipment is not connected to a downstream connection point through jurisdictional safety regulation, refer to Table 3 for the relative impact on each MTR arrangement.

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3.4 Standing offers and deemed contracts

AusNet Services positions with respect to these aspects of the framework are given in the answers below:

Question 14 Standing offer and deemed customer arrangements

- 1) If multiple retailers are active at a premises with MTR, should all of these retailers be required to make the standing offer available? If not, which retailer should have this responsibility?
- 2) Would this issue arise where MTR was supported by a second connection point?

Response to question 14

1 & 2) We consider standing offers or deemed contracts do not support any connection arrangement that is secondary in nature or the current situation where a small customer establishes an embedded network. As such, MTR arrangements 1, 2 and 5 in Table 3 are likely to be supported by standing offers and deemed contracts, because FRMPs charge based on metering data provided without reference to other settlement points shared by the same retail customer. Whilst embedded network subtractive MTR arrangement (4 in Table 3) is not supported by standing offers because the retailer would likely charge settlement charges based on the difference of energy measured and would pass through network tariff costs based on the upstream measured energy (at the gateway meter).

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4 Implementation timing

The MTR Rules change has the potential to introduce a broad range of structural changes to the way retail customers are identified in AEMO and participant systems. The proposed change to implement multi-element metering adds very extensive structural changes to every metering system, customer information system and billing system.

We recommend delaying MTR for a period after the late 2017 Metering Contestability effective date. This period should allow time for the major system changes associated with Metering Contestability to be proven in service and necessary defects rectified, and for the experienced IT and operational resources involved in the Metering Contestability projects to then be moved across to the MTR and any associated IT releases associated with POC. We would suggest that an effective date of the end of 2019 is likely the earliest achievable date. Also this timeline would enable the policy makers and industry to improve our understanding of relevant international developments and to stabilise the operational arrangements for metering contestability.

Question 15 Implementation

- 1) Are there potential synergies available from implementing any rule made in response to AEMO's rule change request in co-ordination with any rule made in response to the Demand Response Mechanism rule change? If so, to what extent?
- 2) What are the potential timeframes for implementing AEMO's proposed MTR framework? Do stakeholders have any specific suggestions to transitional implementation timeframes?
- 3) Are there any other subsequent changes to AEMO procedures or jurisdictional codes that will need to be made following any rule made in response to AEMO's rule change request?
- 4) What changes may be needed to the RoLR arrangements to allow for AEMO's proposed MTR framework?

Response to question 15

- 1) We recommend implementing the Multiple Trading Relationships Rule change co-incident with the Demand Response Mechanism Rule changes may not necessarily reduce any costs, but it would allow customers to benefit from the synergies of both initiatives.
- 2) AusNet Services recommends that the MTR and DRM Rules changes be implemented only after the operational arrangements for metering contestability are firmly established and when the emerging demand for EVs could justify the implementation costs for the industry. For the reasons outlined above, we do not agree that a transitional implementation timeframe would reduce cost on network businesses.
- 3) We consider a number of Victorian codes, the Victorian SIRs, B2B procedures, MSATS CATS procedures, Service Level Procedures for Metering Data Providers, AEMO's accreditation procedure and the AER's NSP exemption guideline may need to change by the effective date of the MTR Rule change.
- 4) We suggest that ROLR arrangements would be no different for many of the proposed MTR arrangements, but that the NERL would need to be amended to change the ROLR provisions from connection points to settlement points. This could create issues for ROLR retailers to bill MTR arrangements they might otherwise not agree to support due to complexity issues.