



TRUenergy Pty Ltd
ABN 99 086 014 968

Level 33, 385 Bourke Street
Melbourne Victoria 3000
Telephone +61 3 8628 1000
Facsimile +61 3 8628 1050

enq@truenergy.com.au
www.truenergy.com.au

1 October 2012

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Email: aemc@aemc.gov.au

Dear Sir/Madam

**RE: Draft Advice – Energy Market Arrangements for Electric and Natural Gas Vehicles
Reference: EMO0022**

TRUenergy welcomes the opportunity to comment on the Draft Advice – Energy Market Arrangements for Electric and Natural Gas Vehicles (Draft Advice) reference EMO0022. TRUenergy is also taking this opportunity to address the general implications of rule changes being considered to accommodate each new technology or market innovation and the obligation that places on existing participants.

TRUenergy welcomes some of the Draft Recommendations made as they serve to strengthen and clarify existing roles and responsibilities however; there are still areas of concern that present significant challenges, such as:

- Contractual and regulatory arrangements to facilitate market entry and participation and contractual rights and responsibilities;
- Costs and cost allocation for system modification incurred by existing participants for the benefit of a relatively small proportion of consumers;
- Metering arrangements and the implications to existing participants and consumers;
- Barriers to entry for EV's and licensing arrangements; and
- Price signalling controlled charging and demand management assumptions.

As a result TRUenergy, submits the following comments and views on what market arrangements would be suitable and where there may be unintended consequences as a result of the Draft Advice.

Contractual and regulatory arrangements:

TRUenergy foresee two models of operation over the coming years in which market arrangements would be required to accommodate, these models are;

- The commercial car park or public charging station arrangements, which could be incorporated into existing connections infrastructure as a component of a much larger connection and are likely to have a variety of different payment arrangements for fleet and personal EV's; and
- The personal EV owner, which is equally likely to engage in charging at public or commercial car parks however, more likely to charge EV's in a residential setting, which is disaggregated, and where the EV resembles a major household appliance.

It is the second of the two models that is of the greatest concern to TRUenergy, primarily because it will be small customers impacted by the change in market arrangements and equally those within the scope of the regulatory frameworks and consumer protection regimes.

TRUenergy, consistent with the Draft Advice¹, agrees that any proposed market arrangements should be consistent with the consumer protection arrangements under the National Energy Customer Framework (NECF) however; the Draft Advice does not go as far as to determine whether all participants holding financial responsibility would be required to hold a retailer authorisation under the NECF.

There are significant inconsistencies between the proposal market arrangements and the NECF that present greater barriers to effective implementation of the Draft Advice in the future, such as:

- The aggregation of residential customers is not permitted under the NECF except where they meet a class of exemption outlined in the Australian Energy Regulator's (AER) guidelines² for on-selling energy which are generally limited to a site that is owned, occupied or operated in which the exempt customer resides, suggesting a geographical similarity for all those that the seller supplies to;
- Authorised retailers are required to supply under the model terms and conditions stipulated under the NECF, whereas exempt selling arrangements are only subject to the conditions placed on them by the AER which vary depending on the class of exemption and would inevitably lead to conflicts in obligations;
- The proposed arrangements do not address the secondary financially responsible participant's contribution to credit support requirements despite having an impact on the total cost incurred by the distribution network.
- Authorised retailers are also obliged to provide concessions that range from percentages to daily fixed amounts depending on jurisdictional concessions frameworks. If the supply is separated between two parties, the concessions frameworks do not allow for multiple claims from separate participants in the same period.
- Disconnection is a last resort and used in limited circumstances after the customer's willingness and capacity have been assessed and it has been determined that they are not experiencing hardship.

Draft Recommendation, 4.4, outlines circumstances where a joint financially responsible party may be exempt from holding a retail authorisation under the NECF exemptions framework (although the AER guidelines do not accommodate geographically disaggregated on-selling arrangements) whereas the other financially responsible participant would be, in theory, the holder of a retail authorisation, supplying energy under the model terms and conditions. These inconsistencies result in either the watering down of consumer rights for a portion of their supply and or make the residual load less attractive to retailers, subsequently reducing competition.

Draft Recommendation 3.5 explores the interaction between shared financially responsible participants in terms of contractual remedies with the customers however; the effect of taking remedial action on the consumer may have a wider effect on the other participant, who undoubtedly has a financial arrangement hedged against supply to the same customer.

TRUenergy believes an effective approach to negate all of the inconsistencies would be to have a tiered licensing regime whereby all participants must comply with all the requirements of the NECF, but the costs and prudential requirements could be tiered based on the relative business models of niche retailers in the NEM. This creates a level playing field for participants and certainty for consumers about their rights and responsibilities. We recommend that this approach be explored further.

Costs and cost allocation:

TRUenergy expects that the system changes required will affect all existing participants to accommodate:

¹ Draft Advice – Energy Market Arrangements for Electric and Natural Gas Vehicles – 29 August 2012 – 1.4.5 The draft advice and its relationship with the National Energy Customer Framework – Page 9

² Australian Energy Regulator- Exempt Selling Guideline December 2011 – 3.1 Proposed classes of Exemption

- The separation of metering data per meter register, rather than at the National Meter Identifier (NMI) level;
- The distinction between financially responsible participants that would be entitled to metering data;
- The separation of network charges, proportionately or otherwise, between shared financially responsible parties;
- Distribution services requested by a participant, then being undertaken on the appropriate meter register than the connection point.

If the expected market development is 100k to 180k Plug-in Hybrid Electric Vehicles (PHEV) and Electric Vehicles (EV) by 2020³, the costs associated with modifying contractual arrangements and systems throughout industry are disproportionately placed on all consumers rather than the party that benefits which is counter to the conclusion drawn in the Draft Advice.

TRUenergy is conscious of the costs associated with even minor system and process modifications, however in this instance all participants would have to modify:

- Meter data management systems to separate consumption information; and
- Primary and secondary relationships between NMI and meter configurations; and
- Alter Business to Business (B2B) functionality to operate services on an individual meter rather than a NMI; and
- Allocation of costs for B2B transactions and connection services to the financially responsible participant; and
- Allocation of credit support and Retailer of Last Resort (RoLR) processes.

TRUenergy estimates that each participant would face a significant initial cost of modifying systems and ongoing data warehousing and management costs to facilitate the provision of data to multiple participants and the Local Retailer.

In light of this preliminary view of the changes required to accommodate multiple or shared financial responsibility, TRUenergy believes that the simplistic solution would be to allocate the EV load a separate NMI, which would facilitate multiple business models and potentially require minor modification to the retail licensing and exemptions regimes. This would reduce overall costs to call consumers, minimise potential barriers to entry and allocate costs to party that caused them.

TRUenergy does not believe that an economic cost benefit analysis has been conducted to determine whether the costs to all consumers are as significant as the potential cost a new metering installation and NMI assignment. A significant number of financial transactions, consumer information and regulatory functions hinge on a simplistic market design and transparent transactions roles and responsibilities including a number of consumer protections provided by governments. The modification of market systems, and subsequently all downstream participant systems, to accommodate a specific business model creates inefficient outcomes.

Metering arrangements:

TRUenergy fundamentally disagrees with the alteration of metering arrangements to create parent and child-metering arrangements, redefining connection and supply points, and altering the settlement process to accommodate a 'subtractive' settlement of supply and service charges as described in Draft Recommendation 3.2.

In the Draft Advice⁴, the connection point (which would subsequently become the parent), is described as the place where market settlement would occur for both the NEM and distributor use of system changes. This means that the two supply points beneath would required separate metering to determine their financial responsibility for electricity only and the parent connection point bears the financial and credit support costs for both participants for the distribution use of system costs.

³ Department of Transport Victoria – Presentation - Victorian Electric Vehicle Trial – Vehicle Sales Forecast provided by AECOM 2011

⁴ Draft Advice – Energy Market Arrangements for Electric and Natural Gas Vehicles – 29 August 2012 – 3.1.2 Analysis – Page 27

A parent and child metering arrangement also appears to be counter to the benefits contemplated for Demand Side Participation (DSP), as the technology to provide DSP has to be facilitated by the metering. The functions required at the child meter would be:

- Interval data and time switching for control of charging, time of use pricing structures; and
- Bi-directional metering to capture stored energy being exported back to the grid, i.e. Vehicle to Grid (V2G); and
- Remotely accessible contactors for load shedding and dispatch of stored energy from the EV

These functional requirements suggest that the technology would be the equivalent of market metering arrangements similar to that of the Victorian Advanced Metering Infrastructure (AMI) functional specifications.

If the proposed model is intended to be the least cost option compared to the existing market arrangements the addition of a second meter, of an equivalent standard to the Victorian AMI metering technology, would require the same cost as a market meter.

TRUenergy believes that the least cost option remains as separate metering installation, and connection point; the metering cost could be built into the contractual arrangements with the customer and, should the customer terminate their contract, the termination cost would include the residual value of the metering.

Barriers to EV entry

TRUenergy do not believe that there are barriers to market entry however, recognise that the authorisation regime for retailers could be improved to enhance innovation while continuing to ensure protections are maintained for consumers.

The principle of a licensing regime is to ensure that an adequate level of scrutiny is placed on those wanting to participate, to ensure that they have the technical and financial capacity to maintain market integrity and ensure consumers are equally provided access to the services on fair and reasonable terms. In the market, there are in excess of 30 retailers currently operating, with recent successful applications for retail licenses in Victoria and South Australia, all granted under the same, or similar, conditions to that of existing participants.

Altering metering arrangements and separation of information and transactions for the purposes of accommodating potential new entrants will lead to higher costs. In an environment where cost is a significant issue, any solution that ensures the proponent bears its costs rather than the cost being incurred by all consumers must be the be the overarching objective.

Price Signalling, Controlled Charging and DSP

TRUenergy supports the use of price signals, or time of use prices, to drive efficient charging behaviour that is also highlighted by studies undertaken on charging behaviour in Nashville and San Francisco based EV trials⁵, which demonstrate the results of effective price signals and how they influence the charging behaviour.

Controlled charging and V2G for DSP however are dependent on the availability of EV's at the time of demand peaks, contractual arrangements for accessing stored energy, and the potential price at which electricity is sold, and purchased from that customer at peak demand times. To encourage the use of stored energy for the purposes of DSP the incentives must be in place to achieve this. The price for V2G must be recompense for the volume of energy supplied, the inconvenience of being without the EV and the potential of having to recharge at a high cost period.

⁵ Schey, Scoffield and Smart, A First Look at the Impact if Electric Vehicle Charging on the Electric Grid in the EV Project – May 2012 – Page 12

An effective price signal may determine when the optimal time for charging is however, the time and location of a demand constraint may not effectively align with the placement of EV's and or the consumers willness to participate.

Summary:

TRUenergy supports the view that the embedded networks framework requires significant enhancement (Draft Recommendation 3.4), with the exception of defining downstream connections as 'supply points', which will only serve to cement embedded networks within the retail framework; and that proponent bears the costs associated with metering enhancement. However, structural changes to the National Electricity Market (NEM) would be required to accommodate these new arrangements including system changes that extend to existing participants and will impose significant costs that consumers will ultimately bear.

TRUenergy do not believe that the policy settings are aligned to consumer behaviour and the costs of modifying the market design and systems to accommodate misaligned objectives far outweigh the potential benefits. The reliance on consumer protections outside of the NECF that do not contemplate the nuances of energy will be a significant displacement of risk to existing participants and consumers.

The Draft Advice also suggest that the parent connection or 'supply point' would hold the financial burden of network charges and additional loss, while the child avoids those charges and exposure to credit support obligations. If the policy is to ensure that the proponent is responsible for its costs then the arrangements must not place undue burden on existing participants shielding the person responsible from those costs.

Despite the Draft Advice indicating that the cost should be allocated to party responsible⁶; the costs that will be incurred by industry to modify systems, separate meter data and network billing, and ensure network security, far outweigh the potential cost per EV owner; and impact on all consumers.

The effective charging behaviour via price signalling is a welcome first step for consumers to identify their individual impacts, which is not just limited to EV's, however; the concept of later using stored energy without contemplation of the incentives to ensure its availability at an adequate price suggest that the costs and benefits have not been adequately assessed.

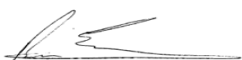
Contractually, TRUenergy is concerned that there is no incentive for a third party to negotiate on the shared costs and responsibilities for credit support. If a third party can participate in the NEM, connect its' own meter, disconnect, limit or interact in any other way with the supply to a property without complying with the energy specific regulations and or consumer protections why would they incur additional cost and controls.

TRUenergy maintains that the simplest and most cost effective solution is to have a second meter and NMI assigned, as has been proposed, however that NMI and meter are on market and contestable. This ensures that the proponent bears the costs and enables the introduction of any new entrant into the EV market, or any other innovative technology, by means of a different class of participant. It is in the long-term interests of consumers, is transparent, places equal performance obligations on third parties against the NECF provisions and protects market security.

Please also see the attached appendix addressing the Draft Recommendations and Questions throughout the Draft Advice.

Should you have any questions in relation to this submission please call me on (03) 8628 1484.

Yours sincerely



Ross Evans
Regulatory Manager
TRUenergy

⁶ Draft Advice – Energy Market Arrangements for Electric and Natural Gas Vehicles – 29 August 2012 – 1.3.2 Key principles for the review – Page 4

Appendix: Draft Advice – Energy Market Arrangements for EV and NGV

Discussion Points and Questions AEMC	Response
<p data-bbox="190 300 663 323">Box 2.1: Draft recommendation</p> <p data-bbox="190 363 1066 488">Our power of choice review found that the current network and retail tariffs do not necessarily reflect the cost of supply and the delivery of electricity. This means that most consumers currently do not have options to capture the value of DSP activities.</p> <p data-bbox="190 496 1066 651">Therefore, the current pricing arrangements are unlikely to promote efficient charging behaviour for EV consumers. Although efficient behaviour requires high use consumers to face cost-reflective prices, we do not recommend mandating specific price structures for residential EV consumers because:</p> <ul data-bbox="190 691 1106 845" style="list-style-type: none"><li data-bbox="190 691 1106 778">• EVs should be treated as other forms of large load and DSP and the power of choice review will provide advice on how the market could move towards more cost reflective prices; and<li data-bbox="190 786 1106 845">• Retailers and networks can still develop their own EV specific tariffs to incentivise efficient behaviour.	<p data-bbox="1131 363 2033 456">TRUenergy believes that Time of Use pricing will drive efficient charging behaviour and endorse the recommendation that EV Load is an additional load rather than a separate product.</p> <p data-bbox="1131 496 2018 651">EV's could be views as being an additional appliance load in a household similar to an air conditioner or hot water service however, the appliance is transportable and may not always be in position to curtail or source energy from, therefore presents additional complications for DSP.</p>

<p>Also, we recommend that:</p> <ul style="list-style-type: none"> • there may be merit in having some form of geographical variation in the DUOS charges to better focus the network costs onto the EV consumer and to address the effects of EV uptake clustering in particular locations at the early stages of the market; and • Meters with interval read capability are necessary to enable consumers to be incentivised to behave in a manner that yields efficient market outcomes. The power of choice review is exploring how high use consumers, such as large load consumers, can be allocated interval (or other time varying) meters to facilitate efficient behaviour. 	<p>TRUenergy agrees that geographical variations in DUOS may reduce clustering however the significant variable that must be considered is the range and efficiency of the EV.</p> <p>Unfortunately the majority of EV uptake will be isolated to metropolitan areas, and regional hubs, until there is significant development in charging stations is more wide spread to accommodate the vehicle range.</p> <p>TRUenergy supports the view that interval metering technology is crucial to maximising efficient charging behaviour however, if a parent child metering arrangement is determined as the cost effective solution, there is no incentive to provide metering that capable of recording in intervals leaving the programmed charging functionality as the only tool available.</p>
<p>Question 1 EVs and pricing</p> <p>Do you agree that efficient EV charging behaviour should be incentivised through network pricing signals? If so, what arrangements are necessary to implement these pricing signals?</p>	<p>EV load, like any other controlled load must be flexible to ensure that the effective signals are provided to consumers while ensuring that the vehicle remains available to the consumer.</p> <p>As detailed earlier in our submission, Time of Use pricing would provide tangible incentives for efficient charging behaviour.</p> <p>TRUenergy believes that there are limitations associated with the uptake of Time of Use pricing, the most significant being obtaining explicit informed consent from the consumer to apply the relevant tariff that includes the incentive.</p> <p>Subsequent to the consent requirements, there are a significant number of policies associated with reversion and formation of tariff structures that may inhibit innovation.</p>

<p>Box 2.3: Draft recommendation</p> <p>We consider that the connections charging framework administered by the AER is appropriate for EVs connecting to a distribution network and we are not proposing any changes. The framework for setting upfront connection charges under Chapter 5A of the NER allows for the possibility of applying a connection charge to EVs connecting to a distribution network depending on the nature and size of the connection.</p>	<p>TRUenergy, agrees that the connection framework should be able to accommodate EV connections however, as is required under National Energy Retail Rules (NERR), a connection request is to be made by to a distributor by a retailer where the retailer has a relevant contract with the customer, and does not contemplate third party provision or requests.</p> <p>This suggests that the retailer has or will have a contract for supply, once connected, and the charges associated with the connection will be imposed upon the retailer responsible.</p> <p>To achieve the charges being imposed on a third party the B2B arrangements would need to be modified and the NERR¹ to accommodate another party making the request and modifying and existing connection.</p>
<p>Box 2.4: Draft recommendation</p> <p>We consider that the right to the benefits of controlled charging ultimately lies with the consumer. This right can be assigned by the consumer to other parties in exchange for benefits to the consumer.</p> <p>To realise the benefits of controlled charging, effective commercial relationships (or contracts) between the consumer and potentially DNSPs, retailers and aggregators are required. We recognise the role that third parties (such as aggregators) can play in negotiating (on behalf of the consumer) the allocation of benefits between multiple parties.</p> <p>To assist these third parties in negotiating the benefits of controlled charging so that it is captured in commercial contracts, it may be necessary to set some regulatory guidance on the steps to take in the negotiation process and possible measures to assess the value</p>	<p>TRUenergy agrees that there fundamental rights should be assigned to the consumer and those rights may be traded for other reductions, discounts etc however, the formation of such contracts and associated incentives have not been contemplated in the current market.</p> <p>Because the incentives have not been quantified and contemplated as a trade off for the consumer convenience it is difficult to determine whether the DSP applications will be attractive to consumers.</p> <p>Furthermore the, in the absence of identifiable incentives, negotiation of shard costs between financially responsible participants is compromised.</p> <p>If only the second financially responsible participant has control of</p>

¹ National Energy Retail Rules – Division 2 – Customer Connection Services – Section 79 Application for Customer Connection Services

<p>of DSP to aid the negotiations.</p> <p>The power of choice review is exploring how the energy market arrangements should support these contracts.</p>	<p>the benefits because the demand response is facilitated through their operation, they will receive the revenue, control and financial benefit from on-selling that demand response without any incentive to share the supply related costs.</p>
<p>Question 2 Controlled charging</p> <p>Do you have any suggestions on how to improve the method for valuing non-firm benefits and improving the negotiation process among multiple parties so that the diverse benefits of controlled charging are captured?</p>	<p>TRUenergy believes that the most material current benefit available is the ability to respond to price signals by scheduling charging activities at times of low demand.</p> <p>TRUenergy, contrary to the benefits assessment, also believes that the non-firm benefits have been overstated and that consumers would be less likely to trade the use of their vehicle on peak demand days for a financial benefit if it means that they then need to wait for the discharged electricity to be replaced.</p>
<p>Box 2.5: Draft recommendation</p> <p>We consider that the right to control the discharge of an EV back to the grid resides with the EV consumer.</p> <p>The consumer can assign the costs and benefits of EV discharging to other parties (e.g. retailers, DNSPs, aggregators) in exchange for consumer benefits through commercial relationships (i.e. contracts). There is a role for third parties to negotiate on behalf of consumers the set of benefits falling across multiple parties.</p>	<p>TRUenergy strongly agree that the rights to discharge any stored energy reside with the consumer however, note that there are no current incentives or limitations placed on the rights of the parties.</p> <p>TRUenergy also considers it important that the contractual arrangements between the EV user and the party that benefits from the discharge of stored energy that the right to recharge, if required, is effectively neutral.</p>
<p>Question 3 Vehicle to Grid</p> <p>Should clause 7.3.1(a)(7) of the NER be amended to reflect the current early status of V2G? Should interval meters be required to have bi-directional capability?</p>	<p>The concept of V2G would require an additional meter to accommodate multiple contactors and bi-directional functionality to facilitate measurement of discharged energy if used for DSP.</p> <p>Currently all interval metering has bi-directional measurement facilities to accommodate FiTs suggesting that the metering less than the standard used in the market currently would not be capable of delivering the same functionality.</p>

<p>Question 4 Identifying a large load (including an EV)</p> <ol style="list-style-type: none"> 1. Should any loads above a threshold (e.g. 15 amps) be identified to the DNSP? Could the Wiring Rules (AS/NZS 3000:2007) provide the basis for determining the maximum demand at a premise and provide the means by which an electrical contractor can notify a DNSP of a new or altered installation affecting maximum demand at that premise? 2. If there are no requirements to identify particular appliances, should there be a total load threshold above which identification to a DNSP is required? 	<p>TRUenergy believes that any load requiring 15amps should be known to the distributor as a principle and, as a modification to an existing connection, modification of existing connections requires certification for prescribed types of work.</p>
<p>Box 3.1: Draft recommendations</p> <p>We recommend that the term 'connection point' in Chapter 7 and Rule 3.15 of the NER be replaced with 'supply point'. The supply point would be the point where part, or all, of the consumer's load would be metered.</p> <p>In the remainder of the NER, the term 'connection point' would continue to refer to the point of physical connection between the network assets and the assets of the network user (consumer or generator).</p> <p>This change would mean that a consumer that establishes an additional metering installation at its premises need not establish a second connection point.</p>	<p>TRUenergy strongly disagrees with this concept as it cements embedded networks within the NER.</p> <p>Embedded networks and on-selling arrangements fundamentally remove visibility of consumers' behaviour and needs from the market, insulate on-selling arrangements from consumer protection frameworks that encapsulate the provision and supply of energy and inhibit competition by erecting barriers to consumer choice.</p>

<p>Question 5 Changing the definition of connection point and supply point</p> <p>Do you agree that changing the definition of connection point and supply point in the NER should facilitate separate metering of loads (or generation)? Does the creation of this new definition produce any unintended consequences? Please provide reasons</p>	<p>TRUenergy believes that changing the definition is not the most effective way of facilitating separate metering and strongly recommends that the costs associated with a new connection with the technology required to facilitate EV's be assessed against the risks of enshrining embedded networks and on-selling arrangements in the NEM.</p>
<p>Box 3.2: Draft recommendations</p> <p>We recommend that a consumer be able to arrange for a parent/child (or subtractive) metering arrangement within its premises when:</p> <ul style="list-style-type: none"> • there is a single connection to the Local Network Service Provider (LNSP); and • there is a single consumer at the premises (such as a residence or small business). <p>Under these arrangements:</p> <ul style="list-style-type: none"> • losses within the premises would be assigned to the parent meter; • all fixed Distribution Use Of System (DUOS) charges would be assigned to the FRMP for the parent National Metering Identifier (NMI), unless otherwise agreed with the consumer; and • the NMI for the child meter(s) would be assigned by the Responsible Person for the child meter 	<p>TRUenergy disagrees with this approach as the proponent then avoids costs however receives financial benefits.</p> <p>As stated in draft recommendation 2.4, the removal of market and consumer protections shifts all negotiation power to the second financially responsible party. Therefore assigning the additional loss to the parent absolves the EV provider all financial responsibility and enshrines disaggregated embedded networks and on-selling arrangements.</p> <p>TRUenergy is also strongly against subtractive metering arrangements as it compromises the integrity of the data used for billing. Under the NERR, and jurisdictional rules, bills must be issued based on readings of the meter however, if a portion of the meter data is subtracted the validity is compromised.</p>
<p>Question 6 Parent/child metering arrangements</p> <p>Do you agree that our proposals address existing issues with parent/child metering arrangements? If so, how should these</p>	<p>TRUenergy strongly disagree with parent child relationships under the metering arrangements. Even if the relationship is not</p>

<p>arrangements be specified in the NER? Please provide reasons.</p>	<p>subtractive, there will always be a discrepancy between the values to account for losses and unmetered supplies etc.</p> <p>TRUenergy believes that all metering should be visible to the market therefore disagree that any of the existing arrangements should or would be of value in the NER.</p>
<p>Box 3.3: Draft recommendations</p> <p>We recommend that, where a single metering installation has multiple measurement elements and assigned multiple NMIs (that is, a multi-element metering installation), there must only be a single Responsible Person for:</p> <ul style="list-style-type: none"> • all the components of the metering installation; and • all the NMIs associated with each metering element. <p>We also recommend allowing individual measurement elements within a single device to be regarded as separate metering installations. This would allow individual measurement elements to be:</p> <ul style="list-style-type: none"> • assigned to different FRMPs by the associated consumer(s); and • assigned different NMIs by the Responsible Person. 	<p>TRUenergy believes that the draft recommendation has misunderstood the process for the creation of a connection point. Based on Chapter 7, the role of the RP does not assign a NMI but to, once the NMI is assigned, contract the metering and meter data provider etc.</p> <p>As the NMI creation resides with the LNSP, or in the situation of an embedded network, with the local retailer for that network, there is no process and or procedure for the assignment of a NMI at a meter register level.</p>
<p>Question 7 Multi-element meters</p> <p>Do you agree that having one Responsible Person for multi-element meters is the efficient solution? Are there any other issues with multi-element meters that we should address?</p>	<p>TRUenergy disagrees that multi-element metering with joint financial responsibility is an effective solution given that a multi-element meter costs approximately 50% more than a single element and connection costs remain equal in most cases.</p>
<p>Box 3.4: Draft recommendations</p> <p>We recommend that the arrangements for metering within an embedded network be included in the NER. In particular, embedded networks should be brought into the metering and settlements frameworks in Chapter 7 and rule 3.15 of the NER by:</p> <ul style="list-style-type: none"> • defining connection points between the embedded network and 	<p>TRUenergy agrees that the licensing regime is insufficient and has addressed this point in its submission.</p>

<p>the associated downstream consumers as connection points (and supply points) under the NER; and</p> <ul style="list-style-type: none"> • allowing these connection points (and supply points) to be settled in the NEM. 	
<p>Question 8 Metering in embedded networks</p> <p>Do you agree that our recommendations address existing uncertainties with respect to metering in embedded networks? Please provide reasons.</p>	<p>TRUenergy agrees that the licensing regime is insufficient and has addressed this point in its submission.</p>
<p>Box 3.5: Draft recommendation In situations where there are two (or more) FRMPs at one connection point, we recommend:</p> <ul style="list-style-type: none"> • where there is only one point of disconnection and a FRMP wants to disconnect the consumer, this FRMP can disconnect the total load at the connection point, including the load of other FRMPs; • for multi element metering installations, we have specified ways to share the costs associated with the Responsible Person; • access to the metering installation be managed by the Responsible Person; • when a consumer changes one of its FRMPs, we have suggested ways of managing this process; 	<p>TRUenergy Strongly disagrees with the proposal to have multiple FRMPs per meter:</p> <ul style="list-style-type: none"> • This is currently the process with multi element metering where the second element is controllable unless the first contactor is open. • The concept of shared supply arrangements becomes a complication for a multitude of reasons and is of no practical benefit. • This appears contradictory for DSP and emergency controls. If the DNSP requires priority access to their assets in Vic then what arrangements would be in place to enshrine that provision? • A change in financial responsibility would still have to be communicated via the market however where the primary FRMP is not changing there is an ever increasing detachment between parties

<ul style="list-style-type: none"> • assigning DUOS charges to FRMPs in a manner that is proportional to their impact on total DUOS; • a process where a consumer or FRMP seeks to upgrade one of its metering installations; and ways for addressing situations where a consumer moves house or has a billing/metering query. 	<ul style="list-style-type: none"> • Where there are fixed and variable charges this would be impossible to determine in the scenario where TOU tariffs exist with Critical Peak Pricing structures. • This appears contradictory to the principle that multiple FRMPs operate on the same NMI or metering installation as any upgrade would have to be completed by agreement and conducted through the MP or RP.
<p>3.5.1 Significance of the issue</p> <p>Currently, the NER is designed in the context of:</p> <ul style="list-style-type: none"> • a market participant or FRMP being associated with each connection point;⁶⁹ • each connection point having a metering installation that is registered with AEMO;⁷⁰ and • a unique National Metering Identifier (NMI) for each metering installation.⁷¹ <p>That is, there is generally a one-to-one relationship between a connection point, the FRMP, the metering installation and a NMI. Nevertheless, in the future some consumers and generators are likely to want to be able to separately meter parts of Clause 7.1.2(a) of the NER.⁷⁰ Clause 7.1.2(a)(1) of the NER.⁷¹ Clause 7.3.1(e) of the NER.</p>	<p>TRUenergy believes that the one to one relationship is the foundation that the industry is built on. The benefits and costs are then attributable to the party responsible for causing them, the contractual rights are preserved, and enforcement of each contract is on a one to one basis.</p> <p>Contractually speaking, even as an EV provider TRUenergy could not imagine a scenario where the right to remedy contractual breaches is controlled by a party other than the one consumer has contracted with.</p>
<p>Question 9 Two (or more) FRMPs at a connection point.</p> <p>1. Do you agree that our recommendations will enable two or more FRMPs to operate effectively at a connection point? Please provide reasons</p>	<p>TRUenergy do not believe that the draft recommendations will facilitate multiple FRMP's efficiently managing contractual relationships on a single connection point or 'supply point' shared or otherwise.</p>

<p>2. In the event that one FRMP wishes to disconnect a consumer, do you agree that a FRMP should have the power to disconnect the consumer's total load, which includes the load from the other FRMP? Or do you think that each part of the load should be able to be disconnected independent of the other FRMP?</p>	<p>The concept of exposing a business's revenue to the contractual arrangements of a party with vastly different interests with no remedies and that has not been defined by regulation is unpalatable.</p>
<p>Box 4.1: Draft recommendation</p> <p>We consider that the supply of electricity for the purposes of EV charging would generally constitute a legal sale of electricity in the NEM under the NERL and in Western Australia under the <i>Electricity Supply Act 2004 (WA)</i>.</p> <p>For bundled service providers, we recommend that the AER or the Economic Regulation Authority of Western Australia (ERA) determine whether the services offered constitute a legal sale of electricity. The AER or ERA should consider whether the sale of electricity is a primary or incidental part of the bundle of services provided.</p> <p>We consider that EV battery swap services do not constitute the sale of electricity for the purposes of the NERL, and therefore the energy market arrangements do not apply to these services.</p>	<p>TRUenergy agrees that the supply of energy to an EV is within the scope of the law however, would further argue that the connection of an EV also meets the definition of an appliance.</p> <p>The definition of an appliance², below, suggests that an appliance is something that can be connected and converts electricity from its original electrical characteristics into heat motion etc.</p> <p>electrical appliance means a self-contained electrical appliance in which electrical energy is converted into heat, motion or any other form of energy or is substantially changed in its electrical character;</p> <p>Given that an EV could be defined as an appliance TRUenergy believes that it should not be treated any differently to a hot water service or air conditioner as a single large appliance in a household.</p>
<p>Question 10 Sale of electricity and the bundled service provider</p> <p>Do you consider the AER should be required to specify how it will determine whether a bundled service provider is selling a good or service that constitutes a legal sale of electricity, for example, through a guideline?</p>	<p>TRUenergy, as the industry progresses towards services that impact on the supply and demand components of the industry, agrees that the AER should develop a methodology to determine what, where and when a product or service is impacting on the sale or supply of energy.</p>

² Electricity Safety (Equipment) Regulations 2009 – Part 1 – Section 5 Definitions

<p>Box 4.2: Draft recommendation</p> <p>We consider that the current consumer protection framework is appropriate for EV consumers. However, we recommend that the AER review its retail exemptions framework to clarify the status of EV charging services at commercial EV charging stations where on-selling occurs</p>	<p>TRUenergy agrees that commercial charging stations, car parks and on street charging facilities could be covered by the existing frameworks therefore have no further views.</p>
<p>Question 11 EVs and retail exemptions framework</p> <p>Do you agree that the AER should review its retail exemptions framework to clarify the status of EV charging at commercial EV charging stations where on-selling occurs? Please provide reasons.</p>	<p>TRUenergy agrees that the licensing regime is insufficient and has addressed this point in its submission.</p>
<p>Box 4.3: Draft recommendation</p> <p>We consider that the network licensing regime administered by the AER is sufficiently robust to cater for EVs charged over a distribution network or over an embedded network and are therefore not proposing any changes. We note that the AER has developed a network exemption for EV charging in embedded networks, which would cover commercial EV charging stations.</p>	<p>TRUenergy agrees that commercial charging stations, car parks and on street charging facilities could be covered by the existing frameworks therefore have no further views.</p>
<p>Box 4.4: Draft Recommendation</p> <p>We consider that the current arrangements for addressing the risk of EV service provider financial failure are appropriate and therefore we are not proposing any changes. That is:</p> <ul style="list-style-type: none"> • If the bundled service provider is an authorised retailer then the Retailer of Last Resort (RoLR provisions would apply; • If the bundled service provider is subject to a retail exemption, the RoLR does not apply however the AER may place conditions on the Bundled Service Provider; • If the Bundled Service Provider is found by the AER not to provide services that constitute the legal sale of electricity, then the energy market regulatory arrangements do not apply and the risk of supplier failure become a general risk faced by EV consumers 	<p>TRUenergy disagrees that the financial failure is adequately addressed by the RoLR framework in all instances, in particular, where a service provider has not been required to hold a license or authorisation.</p> <p>TRUenergy believes that all entities participating in the legal sale of energy should be licensed or authorised in some way to ensure the effective management of the enforcement regime.</p> <p>Note: the principle of licensing or authorisation regime is provided primarily for the long term benefits of consumers. Policies that seek to avoid a participants' exposure to licensing or authorisation regimes ultimately waters down the value of those benefits.</p>

<p>Box 5.1: Draft recommendation</p> <p>We recommend that certain aspects of the market rules governing the Balancing and Load Following Ancillary Services market may need to be reviewed to facilitate the participation of EVs (as a load or as energy storage) in the future, if appropriate.</p>	<p>TRUenergy believes that these services are generally attributed on a causer pays basis and recommend that this continues to occur.</p> <p>The provision of Ancillary Services is and should remain technology neutral and those standards should not be compromised to accommodate a particular technology unless all standards for Ancillary Services are lowered for all technologies, and are aligned to the relevant reliability and security standards.</p>
<p>Box 5.2: Draft Recommendation</p> <p>To manage the impact of EVs on peak demand, we recommend that there be appropriate pricing signals faced by consumers. This is best achieved through network pricing signals that capture the cost of supplying electricity and by ensuring that these signals are reflected in retail tariffs.</p>	<p>TRUenergy believes that Time of Use pricing will drive efficient charging behaviour and endorse the recommendation that EV Load is an additional load rather than a separate product.</p> <p>To achieve effective network pricing signals, the tariff must remain whole to ensure that the signal is not isolated information from an unrelated source and can easily be reviewed by the consumer in contrast to their other supply components</p>
<p>Box 5.2: Draft Recommendation</p> <p>To manage the impact of EVs on peak demand, we recommend that there be appropriate pricing signals faced by consumers. This is best achieved through network pricing signals that capture the cost of supplying electricity and by ensuring that these signals are reflected in retail tariffs.</p>	<p>TRUenergy agrees with this recommendation, as stated earlier, price signals</p>
<p>Box 5.4: Draft Recommendation</p> <p>We note that the rights to controlled charging and V2G and the benefits it provides can be apportioned between parties. Third parties such as aggregators can assist in negotiating these benefits among parties. In the NWIS and RNIS, we note that the market structure may result in the ready formation of contracts to capture and apportion the benefits of controlled charging and V2G. We are not proposing any specific changes at this time.</p>	<p>TRUenergy, as stated earlier, do not believe that the contractual incentives exist to enable equitable negotiation of shard costs between financially responsible participants.</p> <p>If only the second financially responsible participant has control of the benefits because the demand response is facilitated through their operation, they will receive the revenue, control and financial benefit from on-selling that demand response without any incentive to share the supply related costs.</p>

<p>Box 5.5: Draft Recommendation</p> <p>We consider that the retail licensing and exemptions framework, including the consumer protections embedded in this framework, is adequate to cater for the charging of EVs and we are therefore not proposing any changes at this time. The WA government has approved a retail exemption for EV charging that appears to cover a broad range of EV charging scenarios</p>	<p>No – Contractual minimum standards and compensation regimes have not been built to accommodate the eventuation of EV’s in the market.</p>
<p>Box 5.7: Draft Recommendation</p> <p>We consider that the current arrangements are adequate to address the risk of being unable to supply electricity to an EV user should a bundled service provider face financial difficulties in WA. We are therefore not proposing any changes</p>	<p>TRUenergy do not have significant views on the operation of the WA market.</p>