



11 February 2021

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Alisa,

EM00040 – Review of the Regulatory Framework for Metering Services

PLUS ES welcomes the opportunity to provide feedback to the Australian Energy Market Commission's (AEMC) market review consultation - Review of the Regulatory Framework for Metering Services – EM00040.

PLUS ES is a registered Metering Co-ordinator (MC) and an accredited Metering Provider (MP) and Meter Data Provider (MDP) in the National Electricity Market (NEM). Our skilled, internal workforce provides metering services across Australia. Our customers range from small residential customers through to Australia's largest manufactures and mining operators.

PLUS ES feedback on the below key points are:

- Accelerated Smart meter rollout pace – we support initiatives that will help accelerate the pace of smart meters across Australia
- Removal of barriers so customers and participants can realise the smart meter benefits - we recognise that, to date, the benefits of smart meters have not been fully realised by customers and participants. As the number of smart meter deployments increases, we expect further investment across the supply chain that will allow these benefits to be realised.
- Cost recovery - MCs and other stakeholders should be allowed to earn a fair return on any investment in smart meter services. This will help encourage further innovation and the delivery of benefits for customers.
- Clarification of regulatory arrangements – in our submission, we outline a number of suggestions that will help clarify provisions of the rules, which in turn will help deliver efficiencies for customers



PLUS ES would welcome further discussions in relation to this submission. If you have any questions or wish for further discussion, please contact Helen Vassos on 0419 322 530 or at Helen.vassos@pluses.com.au.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Clark", is positioned below the word "Sincerely,".

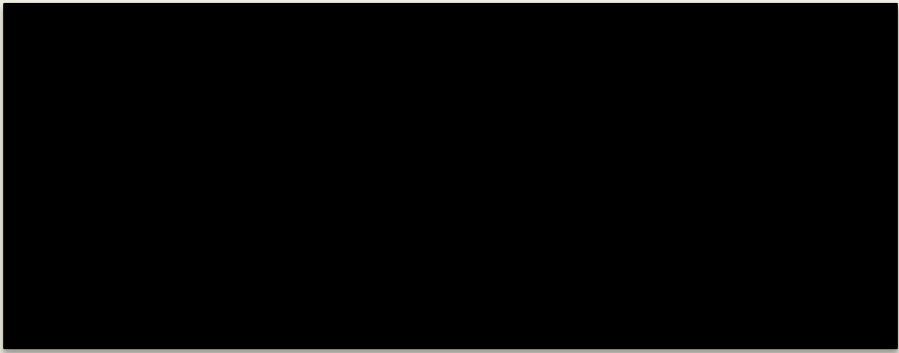
Jason Clark
Executive General Manager


PLUS ES feedback to the AEMC's consultation questions

Questions	PLUS ES feedback
1. Consideration of other market reforms and related work	
1.1 Are there other significant market reforms that are likely to impact the metering framework that the Commission has not identified?	As identified within the AEMC Consultation paper
1.2. Is there additional related work that the Commission should consider in this metering review?	<p>PLUS ES recommends that the following additional work should be considered by the Commission in this metering review:</p> <ul style="list-style-type: none"> • International smart meter programs/ reforms in electricity: Review the success or otherwise of other smart meter reforms and associated advancements to incorporate successful learnings into the Australian market • VIC AMI Roll Out: Review the VIC AMI roll-out for any learnings that can apply, including but not limited to the VIC Network efficiencies and downstream end consumer benefits resulting from the more granular, frequent metering data and services their digital meters deliver. • Federal and jurisdictional government: as we strive for a more carbon neutral future, Government should play a more substantive role in addressing the industry challenges, including and not limited to: <ul style="list-style-type: none"> ○ cost recovery mechanisms for site fix issues, ○ promoting and empowering customers with knowledge on smart meters and their benefits.
2. Assessment Framework	
Do you agree with the Commission's proposed Assessment Framework for this Review? Are there any additional criteria we	

<p>should consider as a part of this framework?</p>	
3. Expectations of Meter Roll Out	
<p>3.1 How does the roll out of smart meters to date compare with your expectations?</p>	<p>To date the roll out of smart meters has been slower than expected. PLUS ES expected a roll out rate of ~10% per annum to allow the benefits of smart meters to be available to customers within approximately a 10-year timeframe.</p> <p>In addition, we expected Retailer Led Deployment (RLD) programs would contribute the largest portion of the smart meter roll out. Instead, costs, inefficient or administrative regulatory rules, the absence of Meter Family Failures (MFF) forecasting by Distribution Network Service Providers (DNSP) have inhibited a greater commitment to RLD, contributing to a lower smart meter roll out,</p> <p>It was also envisaged that Retailers and DNSPs would be incentivised to further explore other sources/activities to accelerate the smart meter roll out such as:</p> <ul style="list-style-type: none"> • Manually Read Interval Meter (MRIM) replacement: to mitigate the less than favourable customer experience with respect to billing etc • DNSP doing repair work on type 5/6 meters – instead of repair work being undertaken these meters could be replaced, ensuring a better customer service <p>At the current rate of deployment, our expectation is that the smart meter rollout will not be completed until ~2044.</p>
<p>3.2 Is the current pace of smart meter deployment appropriate? What should be the appropriate pace of rollout?</p>	<p>The current run-rate suggests there's over 20-years (without any mediating factors being introduced) before the smart meter roll out is complete.</p> <p>The appropriate pace of the rollout should be one that:</p> <ul style="list-style-type: none"> • maximises the number of meter installs at lowest cost; this occurs when all spare economic capacity with regards to meter manufacturing, logistics, install and maintenance is maximised. • support the industry policies or reforms which have been initiated or proposed i.e. Energy Security Board's review paper, Distributed

	<p>Energy Resource activities, etc</p> <p>PLUS ES recognises that the reasons mentioned above, alone, could not incentivise an expedited smart meter roll out. Hence, it is recommended that consideration is also given to incorporate a target timeframe in the regulatory framework. This target state is something that all market participants could collaboratively work towards.</p> <p>Optional milestone dates would also provide further efficiencies, such as but not limited to:</p> <ul style="list-style-type: none"> • DNSPs metering assets not to exceed 20 years of age by year 20XX or on an annual basis etc. For example, assets >20+ years: <ul style="list-style-type: none"> ○ Are well beyond the expected life of the asset – a return on the asset has been earned ○ They have an increased probability of malfunction, possibly resulting to a poor customer experience, invariably via costs, such as incorrect billing etc. ○ There is a cost to serve the asset beyond its life expectancy is inversely proportional to the benefits it can deliver ○ The industry has adopted smart meter competition and the technology can enable future innovation in the energy sector which would also drive network innovation and efficiencies for the DNSPs. <p>A predictable rate of roll-out of smart meters (and associated reduction in legacy BASIC/MRIM meters), would also assist the regulated Network businesses to more efficiently plan and manage the transition of metering responsibilities to contestable Metering Providers.</p>
<p>3.3 What benefits are smart meters providing consumers? Have the benefits changed or improved over time?</p>	<p>With current low penetration rates and jurisdictional constraints, the benefits smart meters are currently providing consumers are limited to the power quality data, energy usage data and some remote services, such as:</p> <ul style="list-style-type: none"> • Remote meter read – provisioning of frequent interval data and enabling more granular detail of the data <ul style="list-style-type: none"> ○ Monthly electricity bills - accuracy of metering data and customer bill ○ Better visibility of end consumer usage

	<ul style="list-style-type: none"> • Access to various technological mechanisms such as apps and customer portals to review usage on a daily basis • Control how and when to use/export energy • Remote upgrades resulting in lesser interruption of supply • Enabling the development of retail products with potential cost-effective benefits - the ability to underpin Time of Use (TOU) Tariffs • DER response via the meter – delivering greater network stability and customer service i.e. the ability to curtail the customer’s generation without interrupting the customer’s supply • Power Quality Data: - include Voltage, Current, Power, Power factor, Phase Angles etc. The smart meter can support various measurement intervals (e.g. instantaneous, average, min and max values) <p>The benefits have increased over time as the smart meter saturation in the National Electricity Market (NEM) grows and familiarisation of the smart meter’s capabilities and benefits expands. Benefits will further increase with the advancement of technology and enablement of more value-added services such as, but not limited to, remote energisation services, near real time data, events and alarms for outage management etc.</p> <p>As such, the industry as a whole needs to have a forward view and plan to be able to proactively deliver these services.</p>
3.4 Have the prices of smart meters plus the costs of associated products and services changed from the introduction of Competition in metering? If so, how?	
4. Are incentives in the right place?	
4.1 Are the incentives in relation to smart meter roll out correct? Please provide details on	PLUS ES believes that the appropriate market participant incentives exist for customer-initiated requests of smart meters such as a new connections and solar installations, as:

<p>why/why not.</p>	<ul style="list-style-type: none"> • These requests are customer initiated/ requested – the customer is incentivised as the meter will deliver a specific requirement for them, i.e. enable supply to their electrical infrastructure, provide more granular interval data on their energy usage etc • New connections: the chronic site issues which may plague established sites are not present. <p>The incentives for the market led and mandated Retailer roll out mechanisms are not proportionally aligned with all the recipients of smart meter benefits.</p> <ul style="list-style-type: none"> • Benefits: <ul style="list-style-type: none"> ○ Achieving these benefits requires a deployment scale which is yet to be achieved across the NEM. ○ There are multiple parties which will benefit from the deployment of smart meters, i.e. Retailers, DNSPs and the customer • Costs: <ul style="list-style-type: none"> ○ The cost associated with the roll out of smart meter is borne by the Retailer and ultimately by the end consumer. The incentive and financial burden is not proportionally allocated to the beneficiary parties, such as Retailers, customers and DNSPs • Innovation: the absence of a large-scale saturation of smart meters disincentivises downstream innovation until the market forces would support the capital expenditure
<p>4.2 Is the current market structure financially viable? If not, for whom is it not financially viable?</p>	
<p>5. Drivers of Smart Meter Roll Outs</p>	
<p>5.1 What were your expectations regarding the drivers of smart meter roll outs?</p>	<p>PLUS ES expectations regarding the drivers of smart meter rollouts would be:</p> <ul style="list-style-type: none"> • underpinned by harmonised regulatory requirements across all the

	<p>participating jurisdictions. i.e.</p> <ul style="list-style-type: none"> ○ Enabling adoption of remote energisations services ○ Incentivising the replacement of aged assets etc ● Participants would be more incentivised to transition to smart meter technology. i.e. <ul style="list-style-type: none"> ○ Retailers' targets to reduce the cost to serve and reduce revenue loss for non-payment. ○ The benefits smart metering would deliver to the DNSPs with respect to assisting them monitor the health of their network
<p>5.2 Has there been any changes in the overall reasons for installing smart meters since the Competition in metering rule commenced?</p>	<p>Whilst there have not been any changes in the overall reasons for installing smart meters since the commencement of the competition in metering rule, jurisdictional changes like the SASH Initiative has introduced additional requirements for all new and replacement metering installations.</p> <p>The SASH initiative has introduced a blanket metering specification requirement irrespective if the site has or intends to have solar generation. This has also triggered the replacement of existing metering in some instances which was not anticipated with the introduction of Competition of metering and ultimately increasing the costs of metering installations for SA customers.</p> <p>Similar mandated metering changes in other jurisdictions may trigger a similar situation.</p>
<p>5.3 Which parties should be responsible for driving the roll out of smart meters?</p>	<p>Within current market structure the FRMP, i.e. Retailers are responsible and best placed for driving the rollout of smart meters as they own the customer relationship and interface:</p> <ul style="list-style-type: none"> ● They receive and appoint the MC for NMIs which have been identified as MFF sites and additionally, ● They are enabled by the rules to drive an RLD by targeting their customer database. <p>Additionally, as a major beneficiary of Smart Meters in the future, DNSPs should also be incentivised to play a driving role, especially in the Aged and Failed Asset Replacement Program.</p> <p>However, participants are heavily invested in the current contestability structure and any changes would come at a significant cost. Hence, each</p>

	<p>party who has a benefit from the smart meter needs to be incentivised¹ to develop a smart meter roll out plan and deployment to be facilitated by the Retailer.</p>
<p>5.4 Do consumers have clear information on the benefits of smart meters and their rights relating requesting a smart meter?</p>	<p>There is an opportunity for government bodies and Retailers to improve a consumer’s knowledge with respect to smart metering and its benefits.</p> <p>Whilst smart meter uptake has been largely customer-driven in Australia (Victoria being an exception), its main drivers have been investment in solar PV and new connections. Australian consumers are largely unaware of the benefits of smart meters, compared to other countries that have heavily invested in education campaigns.</p> <p>Furthermore, the level of customer knowledge on smart meters and their rights relating to requesting a smart meter can be determined to be inversely proportional to the customer experience and customer complaints. A recent example was evident from the rollout of SASH initiative. The obligation for nominating a Relevant Agent was put on customers without adequate customer education of their roles and responsibilities.</p> <p>Additionally, the absence of a robust End 2 End operational framework for an efficient implementation of these changes resulted in some customers experiencing a bad customer experience and complaints.</p>
<p>6. Customer Experience</p>	
<p>6.1 What are your views on the customer experience in relation to smart meter roll out and installation?</p>	<p>PLUS ES have evidenced a decrease in customer complaints since the implementation of metering competition. Factors contributing to this:</p> <ul style="list-style-type: none"> • Participants becoming more familiar with metering competition and the associated processes • New Metering rules being implemented such as installation timeframes which have delivered a more consistent installation timeframe – whilst this has allowed a reduction in complaints, PLUS ES also supports that it has constrained the level of customer service and increased the installation cost which an otherwise flexible timeframe window could deliver.

¹ Many use cases for smart meters also do not stack up unless there is a sufficient penetration of meters in the NEM. As such, adequate incentives and access to required metering and site information should be accessible to market participants to ensure they contribute to the smart meter rollout.

	<ul style="list-style-type: none"> • Customer being better informed of the installation process <p>According to Australian Energy Regulator (AER) data, customer complaints related to smart meters per 10,000-meter installations have been generally trending down, with the NEM average decreasing 83% from Q3 FY19 (254 complaints per 10,000-meter installs) to Q4 FY20 (43 complaints per 10,000 meters installs).</p>
7. Industry Cooperation	
7.1 Do you have any suggestions on how industry cooperation can be improved?	<p>PLUS ES have the following suggestions on how industry cooperation can be improved.</p> <ul style="list-style-type: none"> • Whole Current metering – individual residential and small business metering (COMMS4D) represents the largest volume of metering installations. Because this metering directly forms part of electrical circuit supplying such customers and located at the junction between the customer and the network, it forms an integral part of the supply connection. For this reason, it makes sense for the Metering Provider to have the same authorisation and access that would have otherwise been available to DNSP technicians who would have previously installed meters for the DNSP. The responsibilities could include: <ul style="list-style-type: none"> ○ Authority to operate network isolation points upstream of the metering installation; ○ Authority to install/replace upstream network isolation / meter protection where safe to do so (appropriate controls in place for live work) ○ Authority for MP to initiate planned and unplanned supply interruptions as part of metering maintenance or emergency maintenance for single - or multiple customer sites with shared supply isolation <p>The above has parallels with the NSW Accredited Service Providers (ASP) scheme, so streamlining this and updating the related regulations in other jurisdictions would help achieve the following benefits:</p> <ul style="list-style-type: none"> ○ “One-stop-shop” to facilitate a new connection or meter replacement

	<ul style="list-style-type: none"> ○ Engaging the one entity instead of relying on the co-ordination activity of multiple entities <p>In parallel with this, streamlining of jurisdictional legislation and regulation to clarify the demarcation of the responsibilities of the DNSP and the Metering Provider at the customer premise.</p> <ul style="list-style-type: none"> ● Improving Market Systems and enhancing the centralised platform for enhanced visibility and transparency of market transactions/events in near real time: <ul style="list-style-type: none"> ○ The current B2B and B2M communication/operational tools are relatively old when compared to the advancement of technology. Information impacting market participants should be readily available and accessible as close to real time as possible. The industry has moved to a smart meter roll out which enables a lot of remote functionalities with advanced communications, yet information could take several days to become visible in the market. ○ Visibility to DNSP Planned Outages – this would allow the flexibility for MPs to also schedule metering installation activities during the same outage timeframe instead of impacting the customer with an additional supply interruption ○ The ability to be more agile with the changing requirements of the industry. i.e. New initiatives – such as SASH, DER etc introduced new participants/roles (i.e. Relevant Agent) and activities such as, curtailment of generation which only a few entities/industry participants have access to and in an inefficient manner. ● Harmonisation of regulatory requirements across jurisdictions: For example, Jurisdictional requirements preventing/constraining an MC to energise their metering installation, i.e. QLD requirement to visually inspect prior to energising a metering installation. The benefits of remote services to a recipient is negated by the requirement of a physical visit. ● Clarification/Interpretation of rules: <ul style="list-style-type: none"> ○ Clear interpretation and application of the in-service compliance and
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	<p>asset management obligations imposed on Metering service providers would benefit from the review. For example, the current challenge of 100% inspection regime, over a 10-year period, for all Whole Current metering installations, as interpreted by Australian Energy Market Operator (AEMO), is not a viable option when these sites are read multiple times a day and closely monitored by remote communications for any errors or malfunction. The review should look at:</p> <ul style="list-style-type: none"> ○ correct or correcting the interpretation of the Rules (National Electricity Rules (NER) and Retail Rules (NERR)) and ○ the economic cost of imposing onerous compliance obligations where the benefits do not stack up.
<p>7.2 Are changes to the market structure or roles and responsibilities needed to improve the consumer experience?</p>	<p>PLUS ES believes some changes to market structure and roles/responsibilities are needed to improve economic return, reduce administrative overhead and improve the consumer experience.</p> <ul style="list-style-type: none"> ● A participant should be enabled with the correct responsibility for the task/s they need to undertake to deliver efficiencies, (ultimately reducing cost), and delivering a better customer service/experience. <p>Under the current market structure, numerous compliance obligations sit with the MC. However, in several instances, the MC is unable to comply with such obligations for various reasons. This often results in delays, which ultimately impair customer experience. For example,</p> <ul style="list-style-type: none"> ○ Meter Malfunction/Replacement – the compliance obligation on the MC and liaison with the customer is required. The Retailer owns the relationship with the customer and there is a dependency on the Retailer and their internal processes, on how the MC should proceed with the rectification of the metering installation. Often there are scenarios where a meter replacement is required but the MC is unable to replace the meter for reasons such as impaired access or customer refusal. The MC is accountable for the metering installation, but unable to liaise with the customer to facilitate meter replacement as the Retailer owns the customer relationship. This is a growing market issue as contestable MCs fail to

	<p>replace type 5/6 meters and the site cannot revert back to the initial MC, leaving the site in limbo with no clear resolution.</p> <ul style="list-style-type: none"> • Business customers, with small market tail sites: Large corporate customers may have many small SME market sites in their portfolio (e.g. Franchises, Multi-site customers). When these business customers chose an MC for a large site or a group of sites it is always difficult to have the small market SME sites or tail site meters exchanged under the current regulations, as the Retailer chooses the MC, not the business. <p>Currently these large business customers are reliant on the Retailer making a nomination or commercially agreeing to allow a Direct Metering Agreement with a small market customer.</p> <p>Enabling the large business customer to nominate the MC for all their sites, including small customer tail sites, would drive a more efficient process and a better customer experience.</p> <ul style="list-style-type: none"> • Whole Current metering – individual residential and small business metering (COMMS4D) represents the largest volume of metering installations. Because this metering directly forms part of electrical circuit supplying such customers and located at the junction between the customer and the network, it forms an integral part of the supply connection. For this reason, it makes sense for the Metering Provider to have the same authorisation and access that would have otherwise been available to Network technicians who would have previously installed meters for the Network. The responsibilities could include: <ul style="list-style-type: none"> ○ Authority to operate network isolation points upstream of the metering installation; ○ Authority to install/replace upstream network isolation / meter protection where safe to do so (appropriate controls in place for live work) ○ Authority for MP to initiate planned and unplanned supply interruptions as part of metering maintenance or emergency maintenance for single - or multiple customer sites with shared supply isolation <p>The above has parallels with the NSW ASP scheme, so streamlining</p>
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	<p>this and updating the related regulations in other jurisdictions would help achieve the following benefits:</p> <ul style="list-style-type: none">○ “One-stop-shop” to facilitate a new connection or meter replacement○ Engaging the one entity instead of relying on the co-ordination activity of multiple entities <p>In parallel with this, streamlining of jurisdictional legislation and regulation to clarify the demarcation of the responsibilities of the Network and the Metering Provider at the customer premise.</p> <ul style="list-style-type: none">● PLUS ES would like to recommend the consideration of combining MC and MP into a single market role. Presently, the NER describes the MC role separate to the Metering Provider (MP) role. The MC is responsible for asset management and to ensure the compliance of the metering and the MP is responsible for the installation and maintenance.<ul style="list-style-type: none">○ Presently, the market is dominated by combined MP/MC entities. However because they are presently two roles, there are two sets of auditing – one for each role – and two sets of market transactions (FRMP/LNSP/Customer nominates MC then MC nominates MP) – which could be argued is inefficient and partly a duplication.○ When the MC and MP roles are different competing entities – the obligations of establishing contractual arrangements, dealing with asset management, ensuring compliance and directing installation and maintenance can be problematic. There doesn't seem to be a benefit in the roles being separated. <p>While PLUS ES has pursued Non-Aligned-Service-Provider contracts (NASP), competing entities are unwilling as it opens up significant commercial risks</p> <p>Reporting is problematic, for while the MC has the obligations and must report back performance to the Retailer, getting the data from non-aligned entities is extremely difficult. However if the roles were combined, these above issues would be</p>
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	<p>eliminated and simplified – unlocking efficiency and improving compliance.</p> <p>Keeping the MC and the MDP separate is still desirable and viable in a competitive model without the same degree of challenges experienced with the MP role.</p>
8. Expectation of Metering Services	
<p>8.1 What expectations did you have around the services that smart meters would provide? Were your expectations met?</p>	<p>PLUS ES expectations of services which would be provided by smart meters to customers and industry participants included:</p> <ul style="list-style-type: none"> • Remote services providing improved, cost efficient and timely customer service i.e. widespread remote energisations. • Frequent and improved data quality: <ul style="list-style-type: none"> ○ on demand/real time detailed consumptive data / detailed reporting ○ Daily interval meter consumption data presented to customers to enable better end consumer choices for energy management ○ Increased interval meter data reducing the reliance on Net-System Load Profiling (NSLP) to underpin Retailer Tariffs and increase cost reflectiveness of end customers. ○ Power Quality data for Networks (e.g. voltage measurements) • Load Control (LC) for Networks: <ul style="list-style-type: none"> ○ Network LC switching using meters ○ Dynamic LC • Off market data delivery • TOU metering • Meter Inquiry service for real time meter status reporting
<p>8.2 What services are being provided by smart meters currently? Are these services widely available?</p>	<p>PLUS ES provide the general required services to the market, as per the following roles:</p> <ul style="list-style-type: none"> • MC • MPB /MDP / MPC <p>In addition, the following value-added services are provided:</p>

	<ul style="list-style-type: none"> • Off market services including data delivery to DNSPs • Increased data provision frequency • Data visualisation services / reports • DER services – Dynamic LC via meter • Load Control • Power Quality data • Submetering • Generation curtailment (SASH initiative) • Network use of off market data- trials underway
<p>8.3 What services did you expect from smart meters which have not eventuated?</p>	<p>PLUS ES could currently provide the following services:</p> <ul style="list-style-type: none"> • Remote energisation services: Remote Services – DeEn ReEn – limited by jurisdictional safety obligations • Remote Services – on-demand read • Meter inquiry service • Data analytics services for detection of alarms • Off market data² delivery <ul style="list-style-type: none"> ○ business customers managing demand or power quality – small demand i.e. reactive energy data etc. ○ Take up from Retailer customers to drive usage APPs for end customers. While PLUS ES does provide some of this data, take up is small. • Dynamic LC and DER services
<p>8.4 Are there any services being provided by smart meters which were not anticipated at the time of the Competition in metering rule change?</p>	<p>Some of the benefits that smart meters are providing which were not anticipated as part of the competition in metering reforms:</p> <ul style="list-style-type: none"> • PV generation curtailment (e.g. SASH initiative) - where the wiring to meters is configured so that one of the meter's dedicated Load Control Switches is in series with the generator component of the installation, such that when commanded, could isolate the generator to assist with network stability • Potential to monitor for alarms (temperature, over current etc) at the

² Data delivery frequency and/or data sets outside the scope of the regulatory obligations.

	<p>metering installation via the meter to better anticipate and avoid equipment and switchboard damage</p> <ul style="list-style-type: none"> • In addition, there are some benefits which were technically known but not fully developed at the commencement of the metering reforms including improved network health monitoring such as neutral integrity monitoring, where the smart meter’s voltage and current monitoring could help detect deteriorating neutral conductors.
<p>9. Collection and use of metering data</p>	
<p>9.1 In relation to metering data, what data should be captured by smart meters and why?</p>	<p>Smart meters can measure and record various type of data which can be used for multiple uses cases for market and off market applications. Various data types supported via the meter can be categorised as below:</p> <ul style="list-style-type: none"> • Energy consumption data (e.g. Import / Export active and reactive energy) • Power quality data (e.g. Voltage, current, power, power factor etc.) • Value added logging of events and push alarms (e.g. Outages, high / low threshold breach events, temp alarms etc.) • Other external measurements supported via pulse inputs for water / gas. <p>In addition, these parameters can be configured for</p> <ul style="list-style-type: none"> • various measurement type (High / low, average, instantaneous, cumulative) • Interval lengths (5, 10, 15, 30 min intervals) and • Read frequency (Near Realtime, multiple times a day or less frequently) depending on use case and commercial viability. <p>While the above non-regulated meter data services could be captured by metering installations if the meter configuration and system services were developed and deployed it should not be regulated as a free service as costs exist.</p> <p>Additional data services should be an avenue of value-add that the MC could deliver through bilateral agreements with participants (i.e. Retailers, Networks). An agreement should enable the MC to earn a reasonable return on investments (CAPEX and OPEX investment and ongoing costs such as, development, configuring, deploying, reading, monitoring,</p>

	<p>exceptions management, data distribution, validating, storing etc). This would also assist in enabling the MC to invest further into innovation research and development.</p> <p>If market participants cannot agree costs through bi-lateral agreements, which should realistically be rare, then, although not preferred, a market cost recovery mechanism could be considered for some data as long as sufficient return on MC investment was achieved through this type of mechanism and further cost imposts or returns to shareholders were not impacted.</p>
<p>9.2 In relation to metering data, who should be able to access metering data, and how? What protections should be in place?</p>	<p>There are still significant unresolved issues around data ownership and use.</p> <p>The MC as the metering co-ordinator should ensure that regulated meter data is available to market participants via appropriate mechanisms in a compliant manner as these participants have the right to access this data for billing or market settlement.</p> <p>The MC should also be able to enter mutually agreed bi-lateral agreements with parties requesting non-standard (non-regulated) metering data (not currently used for billing or market settlement purposes) whilst meeting:</p> <ul style="list-style-type: none"> • Market and industry obligations • Privacy and security criteria. <p>While the above non-regulated meter data services could be captured by metering installations if the meter configuration and system services were developed and deployed it should not be regulated as a free service as costs exist.</p> <p>Additional data services should be an avenue of value-add that the MC could deliver through bilateral agreements with participants (i.e. Retailers, Networks). An agreement should enable the MC to earn a reasonable return on investments (CAPEX and OPEX investment and ongoing costs such as, development, configuring, deploying, reading, monitoring, exceptions management, data distribution, validating, storing etc). This would also assist in enabling the MC to invest further into innovation research and development.</p> <p>If market participants cannot agree costs through bi-lateral agreements, although not preferred, a market cost recovery mechanism could be considered for some data as long as sufficient return on MC investment</p>

	<p>was achieved. More non-standard (non-regulated) data and increasing data frequency availability is key to realising the further benefits associated with the smart meter rollout and arguably all market players would benefit from access to further and more frequent data.</p> <p>Additionally, access to metering data by market and off market participants, would promote innovation and support value added services.</p> <p>However PLUS ES would need to ensure appropriate return on investment and ongoing costs for any enhancement or changes to the data participants request from us.</p>
<p>9.3 What impact do you think the Consumer Data Rights may have on the access to, and use of, metering data?</p>	<p>Consumer Data Rights will trigger/promote:</p> <ul style="list-style-type: none"> • Development of interoperable systems and data sharing protocols • Increase appetite for 3rd parties to come up with innovative value-added services • Accelerate customer initiated smart meter exchange • Increase overall customer experience by having better visibility of data usage <p>The MC should also have the ability to earn an appropriate return on investment, for any changes due to the Consumer Data Rights initiative.</p>
<p>10. Future Metering Services</p>	
<p>10.1 What is your understanding of other services that smart meters can provide?</p>	<p>As per PLUS ES response in question 8 and the services outlined in Section 4 of the ‘Review of the Regulatory Framework for Metering Services’ consultation paper.</p>
<p>10.2 What future services do you expect or want metering to facilitate?</p>	<p>PLUS ES considers that advanced meters could provide the following services by exploiting the meter capabilities:</p> <ul style="list-style-type: none"> • Improved safety monitoring • Dynamic load control • Customer interaction e.g. self-service disconnections/reconnections, monitoring of usage /devices via meter interrogation, demand management on consumer side • Two-way connectivity at site, real time diagnostics and data delivery services

	<ul style="list-style-type: none"> • DER response/management (Load and generation curtailment) • Beyond the meter applications including multi utility / connected DER devices via smart comms hub • Off market data / DNSP data
10.3 If additional services are to be provided by smart meters, how should the costs of providing these services be allocated?	<p>The MC as a commercial entity should be able to consider revenue streams such as, bilateral commercial agreements with parties who are 'permitted' to and request additional services.</p> <p>Alternatively, an Industry wide cost recovery investment mechanism could be considered.</p> <p>At a minimum, there should be an appropriate ROI for the operational and capital investment incurred by the participant in providing the additional services (i.e. development, configurations, reading, monitoring, disseminating, validating, storing etc).</p> <p>See also supporting answers in 9.1 and 9.2</p>
11. Penetration of Smart Meters required	
11.1 Are particular metering services only cost effective when a particular penetration is achieved? If so, what services and what penetration is required?	<p>Many use cases for some smart meter services cannot be realised unless there is a sufficient penetration of meters in the NEM.</p> <ul style="list-style-type: none"> • On the low-voltage network (230/400V) where there is limited condition monitoring, it is expected that only the penetration above a particular threshold (e.g.>80%) would be useful to contribute to the faster and more accurate identification and location (and resolution) of network faults • Network power quality data, such as voltage monitoring, is expected to achieve benefits, so long as the metering is evenly distributed across the low voltage networks. • Addressing individual customer voltage complaints would best be achieved with metering at 100% of customer installations • Load control, demand aggregation, DER control for network emergency and Virtual Power Plants (VPP) (aggregation and control of distributed generation) would have a benefit more directly proportional to the percentage of the penetration of smart metering
11.2 What other factors are important in	<p>Factors in determining whether the provision of particular services is efficient or effective, are:</p>

<p>determining whether the provision of particular services are efficient or effective (e.g. geographic spread)?</p>	<ul style="list-style-type: none"> • Deployment timeframe windows (10 business days) which would drive flexibility, increased deployment efficiencies and enhanced customer experience • Reliable and fast communications. Cost effective two-way reliable communication is most important in delivering these services. Which makes some of these use cases only viable for geographic spread with higher concentration of population and network coverage.
<p>12. Encouraging the adoption of smart meters and future services</p>	
<p>12.1 Is the current regulatory framework appropriate for the current needs of metering and the market? Is it flexible enough to provide encouragement for the development of future services in metering?</p>	<ul style="list-style-type: none"> • While additional capabilities can be supported via the smart meter there is no framework for cost recovery. Many of these capabilities requires additional hardware / system and process changes, increased cost of communication and end to end business process overheads. Individual use cases may not commercially stack up however combining multiple use cases and allowing an industry framework for cost recovery will help promote ongoing innovation of the metering solution/services. • FRMP churn is a major risk for MPs, not all Retailers are interested in offering the existing or new value-added services and support future proofing of meter hardware. i.e. If the meter churns to a different Retailer, there is no guarantee that the additional services will be continued with the new Retailer. MPs may not be able to invest in future proofing meter hardware as there is a risk that additional cost of hardware / service may not be realised over the life of the asset. • In other instances where the regulatory framework is an enabler, individual jurisdictional legislation may become the prohibitor or barrier. For example, remote energisation – a capability included in the NER metering minimum specifications, has not been deployed due to a number of factors including jurisdictional prohibitions (NSW) or contradictory requirements which negate the benefits of remote services (QLD). <p>Instead it has become a protracted state by state managed authorisation to operate that adds cost and complexity.</p>

<p>12.2 To encourage higher adoption of smart meters:</p> <p>a. What changes, if any, need to be made to the current regulatory framework for future services?</p> <p>b. What changes, if any, need to be made to other instruments? (e.g. regulatory instruments, guidelines, codes)</p>	<p>To encourage higher adoption of smart meters the Commission could consider the below as potential opportunities:</p> <ul style="list-style-type: none"> • Regulating an indicative timeframe for smart meter population to have reached a certain saturation quota • Aged Assets: Mandating aged replacements of type 5 and 6 meters above a certain age and the availability of an annual forecast • Meter Family Failures: Transparency on the family failure rates and the availability of annual forecasting • Incentivising Retailer led rollouts through minimum quotas • Removing costly administrative handling for the Retailer led rollout: Inform and allow the customer to opt out once without the constraints of long inflexible timeframes • Incentivise Retailers to innovate products to promote smart metering to customers, including but not limited to tariff innovation
<p>12.3 Are there other avenues of encouragement that are available that the Commission has not considered in this paper?</p>	<p>The Commission could focus on the gaps in current cost recovery of additional services (challenges with incentivising the installation of services above the minimum required for market settlement) and risk of meter churn. Areas for consideration could include prescribing higher functionality than the Minimum Service Specification to future-proof access to services beneficial to the Industry and providing a cost recovery mechanism for the MC.</p>
<p>13. Barriers to realising the benefits of smart meters</p>	
<p>13.1 Are there other barriers that were not identified by the Commission that you have found to prevent the realisation of benefits of smart meters and/or slowed the rollout of smart meters in the NEM?</p>	<p>In addition to the barriers the Commission has identified, PLUS ES also includes the following for consideration</p> <ul style="list-style-type: none"> • Roles and Responsibility <ul style="list-style-type: none"> ○ The MC has certain regulatory obligations such as ensuring that the metering installation is compliant. They however do not own/or have the customer relationship or interface and have a dependency on the Retailer to support their compliance process. • Interpretation and clarification of the rules <ul style="list-style-type: none"> ○ Remote Access Energisations. Currently the rules reference the MC can only affect an energisation via remote access. Participants such as Retailers and jurisdictions have varying

	<p>interpretations of remote.</p> <ul style="list-style-type: none"> ○ Clear interpretation and application of the in-service compliance and asset management obligations imposed on the Metering service providers would benefit from the review. For example: Current challenge of 100% inspection regime over a 10-year period for all Whole Current metering installations as interpreted by AEMO is not a viable option when these sites are read multiple times a day and closely monitored by remote communications for any errors or malfunction. The review should look at: <ul style="list-style-type: none"> ▪ correct interpretation of the Rules and ▪ the economic cost of imposing onerous compliance obligations where the benefits do not stack up. ● <u><i>It is a challenge to deal with shared private electricity reticulation infrastructure when trying to install an individual meter</i></u> <p>In a number of cases there is shared electrical infrastructure that sits between the Network boundary point (such as the connection point on the side of the building) and the individual customer metering. Where it is identified that metering infrastructure needs to be upgraded, yet there are multiple NMIs associated with a panel, there should be a mechanism where:</p> <ul style="list-style-type: none"> ○ a single co-ordinated action can be taken involving all of the relevant industry participants to mitigate the customer experiencing numerous supply interruptions and ○ expenditure costs for the upgrade of the metering infrastructure is shared proportionally among the Retailers. <p>It is unreasonable that the first smart meter installation on site bears the cost of the upgrade of the shared electrical infrastructure, especially when this upgrade is forced due to a type 5 or 6 MFN. Further, this may lead to the avoidance of undesirable upgrade work or, worse, finding a non-optimal way of working around the upgrade (working with the existing panel or tacking on a secondary panel) and transferring the problem to the next, Metering Provider (who will again try to avoid doing the job, due to its difficulty).</p>
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13.2 What changes, if any, need to be made to the current regulatory framework for current arrangements to improve deployment?

PLUS ES suggest the following changes can be made to the current regulatory framework.

- **Clarification of roles and responsibilities**

- Metering installation timeframes should have a clear demarcation between the various participants, similar to the meter malfunction timeframes. The MC should have their own clear timeframes separate to the Retailer.

PLUS ES constantly strive to make our deployment processes more efficient, to install in shorter timeframes and meet the customer’s expectations. Sometimes we can be constrained by Retailer’s operational challenges. Some Retailers can use, in some instances, up to 33% of the allocated timeframe to forward the customer request. When the administrative scheduling requirements are considered in the timeframe, including the outage notification to the customer, we may have 1 business day to make the Retailer compliant with their metering installation timeframes.

- **Default agreed timeframe window**

Providing an agreed timeframe window of 5 business days assisted in the deployment of metering installations by providing the MP the flexibility to manage the deployment date, without having to separately manage customer expectations for each date change whilst within the 5-day window.

- PLUS ES recommends that the benefits of the deployment timeframe window is also applied to the Retailer Led deployment; instead of a date which is currently interpreted as a single date. There are numerous factors which could impact the single schedule date i.e. scheduled technician is ill, scheduled jobs took longer than expected, bad weather, etc. This would require contacting the customer or failing that, send the customer a new outage notification and delaying the metering installation by the appropriate timeframe for them to receive it.

In addition, the Retailer Led Deployment outlined process is too long of a timeframe and benefits would be realised by shortening the notification requirements from 16 weeks to

	<p>something more manageable and shorter term whilst providing a 10-business day flexibility for the deployment timeframe instead of the single day.</p> <ul style="list-style-type: none">○ PLUS ES recommends the timeframe window is extended from 5 business days to 10 business days for customer requested metering installations. If the customer does not agree to the 10 business days, they still have an option to agree to a day or the minimum 6/15 business days timeframe. The benefits of this flexibility would drive greater efficiencies in the metering installation process whilst meeting customer expectations. For example, a longer timeframe window would enable a more efficient scheduling window especially for regional areas:<ul style="list-style-type: none">○ Being able to service outer regional/remote locations while offsetting the large travel times with full-day work schedules○ Being able to schedule and utilise qualified technicians time more efficiently instead of expending more time in travel to service single or low volume customer-initiated meter installation requests. <p>This ultimately leads to lower costs and a better customer experience.</p> <ul style="list-style-type: none">● Supporting and recommending the modification and coordination of the State and Territory jurisdictional rules so that they are changed to be both consistent across the NEM and compatible with the roll-out of smart metering and consistent with Australian Standards:<p>Examples include:</p><ol style="list-style-type: none">1. Aligning the Service Protection arrangement (i.e. main fuse at the border between the Network and the Customer):<ul style="list-style-type: none">○ A good example is the NSW SIR that was modified to mandate 80A HRC fuse adjacent to the meter. This accommodated the overlapping role of:<ul style="list-style-type: none">(a) electrical protection of the 100A Network supply(b) adequate electrical protection of a Smart Meter with its internal Supply Control Switch(c) convenient method of isolating customer from the network for meter and other downstream maintenance and
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	<p>(d) convenient method of isolating the customer from the Network for the purpose of network testing.</p> <ul style="list-style-type: none"> ○ A suboptimal example is other jurisdictions, where such a compromise is not agreed, resulting in inefficient processes or compromised electrical protection ○ The Competitive Metering Industry Group (CMIG) have developed a set of Meter Installation Rules. These rules are compatible with smart meter deployment would deliver standardisation and consistency in all jurisdictions. <p>2. Aligning legacy socket metering (plug-in metering) rules:</p> <p>Some jurisdictions have introduced rules covering existing plug-in metering sites, but others have not, causing ambiguity with how such sites are addressed for smart metering purposes</p> <p>3. Clarifying the demarcation of responsibilities between the Network, Metering Provider and Customer:</p> <p>The various SIRs impose requirements on the metering installation, even when the defined border between the Network and the Customer’s electrical installation should be at the Connection Point upstream of the metering installation. These rules belonged to the time when the Network was responsible for the metering – but this is no longer the case. The result is a poor customer outcome, inefficiency and additional cost. If the interface between customer and network was clarified and made more consistent, it would allow for a more streamlined meter installation process</p> <p>4. Minimise unilateral rollout of schemes like the SA Smarter Homes scheme which has required the development of MP policies and systems specifically for that state. It is inefficient to have to manage individual jurisdictional requirements separately and these additional costs are eventually borne by the consumer</p> <p>5. Add additional standardised functionality into the minimum smart metering specifications so that Retailers can offer new features across their fleet without risk of either having to change meter / MP or disappoint a customer. Examples would be a customer</p>
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	<p>messaging platform capability. This could be expanded</p> <p>6. The ownership of non-market meter data needs to be clarified. Where data exists for example voltage measurements which could be of advantage to a network, is this data owned by the Retailer or owned by the MP, and who has the scope to make a commercial offering to say an LNSP to supply that data? These non-market offerings improve the potential return of a smart meter rollout and can accelerate their deployment.</p>
<p>13.3 Are there other tools outside of the regulatory framework that may address some of the current barriers to realising the benefits of smart meters and/or the slower rollout of smart meters in the NEM?</p>	<p>Introduction of financial incentives that would encourage the upgrade of private electrical infrastructure that would otherwise constrain the efficient installation of smart meters. A potential option would be to lobby jurisdictional governments for support to alleviate the burden of site fixes; at a minimum for vulnerable customers who require a metering installation due to a mandated requirement such as a malfunctioning meter or meter family failure.</p> <p>An example of this would be when the smart meter installer comes across a customer's meter board that contains potential hazards such as asbestos meter panel or aged wiring. In the longer term and across the industry, in these circumstances, it would be a better outcome for the customer and the industry if such installations were upgraded at the time of smart meter installation, to a point where the site is no longer hazardous the meter can be installed and can be more easily maintained going forward. However, such sites are often abandoned as too difficult to complete because it is not commercially viable for the metering to be installed and the customer resists additional expenditure.</p>
<p>Other comments</p>	
<p>14. Information on additional issues</p>	<p>PLUS ES has provided the following information on additional issues:</p> <ul style="list-style-type: none"> • Implement a cost recovery mechanism for Industry initiatives, including for example DER activities where the meter is used as a backstop mechanism for generation or load curtailment. How does the MC recover the costs for building the DER backstop mechanism or having to perform a physical re-energisation (if rules permit).? • Removal of the requirement and cost of a CCEW

	<ul style="list-style-type: none">• MC Planned Outage – whilst the NER was amended to include timeframes and the requirement for the DNSP to capture shared fusing this does not necessarily resolve the challenges on the MP and the customer relying on the scheduling of the DNSP for a planned outage to be able to action a metering installation. Not to mention the additional expense of wasted truck visits. PLUS ES propose that this issue is revisited, and a more robust solution is proposed to the industry.• Opening the Victorian market to metering competition. PLUS ES supports that the Victorian consumer would benefit from ending the current metering derogation and opening the metering installations to competition. Some benefits include:<ul style="list-style-type: none">○ Lower cost metering installation and services, through increased competition, especially new connections○ Accelerated innovation driven through competition○ Lower costs for Large Market and Embedded Networks. The cost to provide metering services to these customers in Victoria would be expected to decrease if the small market is contestable, due to economies of scale• Seeking protections for an MC for situations outside of the MC's control (e.g. Telecommunication networks are down, preventing communication with the meter)
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