31 January 2023

Mr. Ed Chan
Director Australian Energy Market Commission
GPO Box 2603
Sydney
NSW 2001

RESPONSE TO: AEMC REVIEW OF THE REGULATORY FRAMEWORK FOR METERING SERVICES: MARKET REVIEW PAPER 22 November 2022 – EM00040

Secure Meters is a multi-national organisation supplying smart-metering products and providing solutions for revenue management, power quality analysis and energy efficiency. Secure Meters is also an accredited Metering Data Provider in the NEM. Secure also provides products and services that can be used to measure energy, inform customers of its use, and help manage consumption.

Secure welcomes the opportunity to provide this response to AEMC's Paper on Review of the Regulatory Framework for Metering Services (Ref EM00040), published in November 2022. The attached document we submit contains our inputs on the key themes of the review and provides answers to selected questions.

We believe that the review paper adequately identifies challenges that may have impacted the current rate of smart meters rollout in the NEM. Identification of these challenges combined with a strong commitment towards the future provides a strong starting point for an accelerated smart metering rollout within the National Energy Market. We strongly support the intent and the purpose of the document.

Should you require any further information please contact either myself or Kam Vessali on 0447372471.

Yours Faithfully

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AEMC's QUESTIONS	SECURE'S RESPONSE
QUESTION 1: IMPLEMENTATION OF THE ACCELERATION TARGET	
1. Do stakeholders consider an acceleration target of universal uptake by 2030 to be appropriate?	Secure supports AEMC's proposed timeline towards 2030. In keeping in line with the National Electricity Objectives (NEO), the quality of service that retail consumers receive from retailers and distribution businesses is heavily reliant on accurate information relating to consumption, reliability, and safety of their supply. Such information presently can only be achieved through accurate metering data provided timely through adoption of smart meters. The proposed timeline appears to provide adequate time for the accelerated rollout to take shape and is not too fast or too slow. This should assist in establishing a cost-efficient rollout plan across the market.
2. Should there be an interim target(s) to reach target date?	Yes. Secure believes interim targets will likely help provide ongoing guidance for the timely rollout of smart-meters and help ensure that the industry tracks and monitors its progress via interim steps towards the final goal of 100% smart by 2030. Interim targets should be considered only after inputs from the market participants to ensure that the interim targets do not place undue burden. The interim targets could be setup as soft-guiding KPIs for the industry.
3. What acceleration and/or interim target(s) are appropriate?	The completion rate of the accelerated rollout is underpinned by successful customer education, accompanying general public support and industry readiness. While having interim targets should be beneficial, the rate of yearly rollout should be determined by knowledge of the customer's opinion and industry readiness. Any interim target should take into consideration that the gradual rollout likely to follow a bell curve from 2023-2030, and overall industry readiness and customer knowledge should be considered while setting yearly targets. Hence, the progress of the rollout may differ among jurisdictions from year to year. An average yearly installation rate of 10-15% of the total number

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	of meters to be converted to smart meters should allow the industry to achieve the proposed target. It is important to have a structure in place that allows for addressing the challenging sites early or mid-way within the program to avoid these being bunched towards the end of the program.
4. Should the acceleration target be set under the national or jurisdictional frameworks?	Yes. Implementation of the accelerated target is best done be done via national rules as this will definitely simplify the compliance requirements for market participants. This should also help reduce costs. The rules should enable participants to work across all jurisdictions. It is anticipated that different jurisdictions may have different rate-of-rollout or targets due to underlying resource issues, continued reliability of supply and other local factors. Hence, a jurisdictional framework within a tight national target may be a more effective and realistic target. Interim targets can be established for tracking purposes.
QUESTION 2: LEGACY METER RETIREMENT PLAN (OPTION 1)	
1. Do stakeholders consider this approach feasible and appropriate for accelerating the deployment of smart meters?	Not entirely. In line with PoC objectives, and with the knowledge that the current market structure remains as-is, Secure supports Option 3 as this option keeps the rollout Retailer led.
2. Do stakeholders consider the Commission's initial principles guiding the development of the Plan appropriate? Are there other principles or considerations that should be included?	Secure supports AEMC's plan
3. If this option is adopted, what level of detail should be included in the regulatory framework to guide its implementation?	Access issues, noncompliance sites, natural disaster, exemptions (if any)

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4. Do stakeholders consider a 12-month time frame to replace retired meters appropriate? Should it be longer or shorter?	As a timeframe 12-months appears appropriate. Availability of skilled resources to undertake this rollout will determine whether the timeframe is appropriate. Perhaps, the rule could allow re-assessing this timeframe after the first 2 years into the accelerated rollout.
5. Are there aspects of this approach that need further consideration, and should any changes be made to make it more effective?	No comment
QUESTION 3: LEGACY METER RETIREMENT THROUGH RULES OR GUIDELINES (OPTION 2)	
1. Do stakeholders consider option 2 feasible and appropriate for accelerating the deployment of smart meters? Are there aspects of option 2 that would benefit from further consideration?	Yes Option 2 is a feasible option as well.\n\nIn general across all options, the consideration for mandatory testing of meters need to be revisited, particularly for sites with customer refusal or noncompliance sites.\n\nIn the process proposed in this draft report, noncompliance sites that are not rectified by the customers within the specified time frame is removed from the list to be done. Such sites would still need continued accuracy testing and an extended but firm timeframe for rectification.
2. Are market bodies the appropriate parties to set out the legacy meter retirement schedule?	Pursuant to current rules and requirements where only accredited metering Providers are responsible for the installation of NEM meters, market bodies would be the most appropriate parties to set out schedules. This approach is best decided upon by Australian energy market regulators.
3. If option 2 is adopted, should the meter retirement schedule be located in the rules, or guidelines developed by the AER or AEMO?	Secure supports the proposal of guidelines to be developed by AEMO. Option-2 has the benefit that the plan is set at AEMC / AEMO / AER level itself, and hence, details of the plan will be available within the framework.\n\nThe rules require that AEMO undertake an annual metering installation audit and as the deferral in the testing of meters because of the accelerated legacy meter exchange (12 months) is proposed, AEMO may be best placed to develop the guidelines.
QUESTION 4: RETAILER TARGET (OPTION 3)	

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1. Do stakeholders consider option 3 feasible and appropriate for accelerating the deployment of smart meters? Are there aspects of option 3 that need further consideration?	Yes. Supported with the proviso that legacy meters can be replaced without delays or hindrances. Retailers will be responsible for the electricity meters under the PoC and they are best placed for roll out of the smart meters. Perhaps, the commission may like to consider a combination of Option 3, with some aspects of Option 1, where a while the Retailer is responsible for the rollout and can start the rollout as per their plans, the DNSP undertakes the steps to develop a legacy retirement plan for the meters.
2. If this option is adopted, what are stakeholders' suggestion on how retail market dynamics could be taken into consideration in both setting the uptake targets and monitoring performance?	The rollout is likely to follow a bell curve from 2023-2030. Any interim target should take into consideration a ramp-up time. A retailer-wise average yearly installation rate for meters to be converted to smart meters can be considered. The targets for the first few years should be firm, and should also include targets for customer education and industry readiness to be met. A strong establishment of the processes and customer support in the first few years, will allow the rest of the rollout to achieve it's intended outcomes in time. It would also be beneficial for the rollout to include some challenging sites in the yearly target. In regard to monitoring performance, as there is churn of end-consumers between Retailers, our view is that the Retailer that initiates and converts the end-consumer's meter to a smart-meter should get to 'count' this installation towards their targets. A churn, post meter conversion, should not impact the Retailer's target.
3. Should the rules or a guideline outline only a high-level target (universal uptake by 2030 taking into account practicality of replacements) or more granular targets or interim targets?	A strict universal target towards 2030, with yearly interim targets of meter s changed purely for guidance and ongoing reporting. Customer education and industry readiness yearly firm targets should also be adopted for the accelerated rollout.
QUESTION 5: STAKEHOLDERS' PREFERRED MECHANISM TO ACCELERATE SMART METER DEPLOYMENT	

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1. What is the preferred mechanism to accelerate smart meter deployment?	Retail lead roll out (Option 3)
2. What are stakeholders' views on the feasibility of each of the options as a mechanism to accelerate deployment and reach the acceleration target?	All options appear feasible. Option 3 is Secure's preferred option as it keeps the responsibility as per the current market roles and structure. Perhaps involvement of the DNSP as an interested and consulted party to help identify legacy meter sites will be beneficial for the rollout, that is, inclusion of some aspects of Option 1 into Option 3. The DNSPs need to identify difficult to do sites and have an active participation in solutions.
3. Are there other high-level approaches to accelerating the deployment that should be considered?	Considerations should be given to: - Jurisdictional timelines and constraints; maybe even considering council level involvement - Review of field resource qualifications under jurisdictional rules such as NSW ASPs etc. - Resource availability constraints due to similar skillsets required for both the MC/MPs metering rollout and required by end-consumers for rectifications. - The more difficult-to-do sites and the definition of 'feasible solutions'.
QUESTION 6: FEEDBACK ON NO EXPLICIT OPT-OUT PROVISION	
1. Do stakeholders have any feedback on the proposal to remove the opt-out provision for both a programmed deployment and retailer-led deployment?	Removal of customer opt-out should help the Retailers and the industry meet the proposed smart-metering goals. In essence, a customer opt-out almost helps towards a mandatory rollout. Thus, a mandated rollout nationally with the support of jurisdictional policies would immensely aid towards meeting the 2030 target.
2. Are there any unintended consequences that may arise from such an approach?	With this change, the rollout would appear to be a mandated rollout. Hence, it is important that the customers are clearly notified about i) the program's benefits; ii) likely consequences such as higher service charges for manual meter readings etc to be borne by the consumer; and iii) any known changes to their existing privileges (if any) in their existing supply.

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1. Do stakeholders consider it appropriate to remove the option to disable remote meter access under acceleration?	Yes. The remote acquisition of meter data is the main feature of smart meter benefits and although, Secure supports this idea, ignoring the fact that some customers will be reluctant to have remote acquisition facilities on their new meters may impact the ultimate objective of the rollout. Therefore, minimum requirements of NEM 12 files should be allowed. Everything else will remain optional for customers.
1. Do you consider the proposed arrangements for notifying customers and record keeping of site defects would enable better management of site defects?	No. Secure's view is that, sites with defects that customers are unable to rectify to be dropped off the list and customer will end up retaining its legacy meters. The number of customers who have site defects may be significant particularly in NSW. Furthermore, the rules around what will or will not be considered as a site defect or what a customer considered an appropriate cost to get a site defect fixed will determine how the success of the accelerated rollout can be measured. For example, what one customer considers an appropriate cost for site remediation, may not be considered as an appropriate cost by another customer. In such scenarios, who decides whether the site should get remediated or be marked for 'record keeping'. It is important to identify whether the objective of this accelerated rollout program is to achieve statistical 100% coverage or actual 100% coverage. If the latter is the main objective, it is recommended that AEMC to consider to establish a rule to allow retailers to refuse making offers to customers with legacy meters at the end of the proposed date of 2030 and these customers be considered similar to unregulated customers where relevant DNSP will undertake the management of their metering, data and billing and

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	customer is to be offered a standard default tariff approved by AER. DNSPs will make a submission to AER for this service as part of their price set. Where the customer has taken the offer for the smart meter, they will receive an offer from interested retailer and will drop off the list. It must also be noted that, as part of AEMC's recommendation, the testing of legacy meters is no longer required. However, under the proposed record keeping and the idea of customers to be dropped off the list may result significant number of customers with legacy meters and in the absence of the testing regime, the accuracy of these meters and subsequent meter data cannot be guaranteed.
QUESTION 9: IMPLEMENTATION OF THE 'ONE-IN-ALL-IN' APPROACH	
1. Would the proposed 'one-in-all-in' approach improve coordination among market participants and the installation process in multi-occupancy sites?	Yes.
2. Are the time frames placed on each market participant appropriate for a successful installation process of smart meters?	Yes, 2030 full replacement is appropriately time framed, subjected to enactment of this law in visible window and due allowance and support for system changes and/or updates.
3. Are there any unforeseen circumstances or issues in the proposed installation process flow and time frames?	The likely challenges that may impact the rate of rollout are: - Shortage of skilled in-field resources - Differences in field resource qualification among different jurisdictions - Age and compliance of wiring among jurisdictions - Shared fuses arrangements & older 'chocolate block' switchboards where replacing meters logistically is a challenge.
4. How should DNSPs recover costs of temporary isolation of group supply from all retailers?	No comment. Relevant market participants will need to agree on a feasible commercial model.
5. Can the proposed role of the DNSP in the one-in-all-in approach be accommodated by the existing temporary isolation network ancillary services?	No Comment
6. Which party should be responsible for sending the PIN in the context of the one-in-all-in approach?	Relevant market participants will need to agree on a feasible process, but the notification to the customer should come from the Retailer.

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1. Do you have any feedback on the minimum content requirements of the information notices that are to be provided by Retailers prior to customers prior to a meter deployment?	Secure supports the level of information proposed. However, if any changes to supply arrangement for the customer is also required, The customer will need to be clearly notified of the changes given to customers in advance such as removal of any bypass switch for hot water services etc. Also benefits of smart metering programs to be marketed among consumer through such information notices
2. Are there any unintended consequences which may arise from such an approach?	No further comments
3. Which party is best positioned to develop and maintain the smart energy website?	Retailers are best position to develop and maintain energy websites,
1. Do stakeholders support the proposed approach to enabling customers to receive smart meter upgrades on request?	Yes.

1. Which of the following options best promotes the NEO:
    a. Option 1: Strengthen the customer impact principles to explicitly identify this risk to customers.
    b. Option 2: Prescribe a transitional arrangement so customers have more time before they are assigned to a cost-reflective network tariff.
    c. No change: Maintain the current framework and allow the AER to apply its discretion based on the circumstances at the time.
	Option 2.

2. Under options 1 or 2, should the tariff assignment policy apply to:	Yes

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a. all meter exchanges – for example, should the policy distinguish between customers with and without CER? b. the network and/or the retail tariffs?	
3. What other complementary measures (in addition to those discussed above) could be applied to strengthen the current framework?	- Ability for the DNSPs to easily access metering data outside of the NEM12 model. - Improved budget management through Pay-as-you-Go, which can be offered by retailers - A common commercial understanding between the market participants for exchange of data outside of the base NEM12 nightly data-delivery-service
QUESTION 13: MINIMUM CONTENTS REQUIREMENT FOR THE 'BASIC' PQD SERVICE	
1. Should the 'basic' PQD service deliver any other variables besides voltage, current, and phase angle?	Provision of Voltage, Current and Phase Angle are features available within smart meters. While this information is available in the meters, transmission, storage and reporting of PQD information would require increased infrastructure and cost as compared to the today's requirement of delivering nightly consumption data from the meter. More work should be done on the modalities of PQD before any rules are formed. DNSPs should also participate and demonstrate system readiness for PQD. Any additional features aside from what is described in this question may require further assessment (such as harmonics and short-interruptions) and may also require further development (if applicable). Any such additional requirements and/or delay may also impact the key objective for accelerated roll out.
2. Does the 'basic' PQD service require any further standardisation, e.g., service level agreements? If so, where should these service levels sit?	It will be useful for the market to consider a common minimum standard for all products where PQD is available and let the exchange of this data be worked out between the parties based on existing systems. The important aspect is that any such standardisation or non-standardisation should not introduce unnecessary costs, thereby leading to a detrimental outcome. This is best structured between the sending and receiving market participants (for example, MCs and DNSPs) such that the cost of delivery and the service commercials for PQD is

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	maintained at appropriate levels. Secure supports either of the approaches and would support further discussion with the participants before landing on a market-wide outcome.
3. Should the Commission pursue a data convention to raise the veracity of 'basic' PQD?	Yes. Based on requirements and readiness a common but simple processing / file transaction structure should be built such that the cost & timeline of implementation don't adversely impact the rollout.
QUESTION 14: UTILISING THE RIGHT EXCHANGE ARCHITECTURE FOR THE 'BASIC' PQD SERVICE	
1. Should the industry use the shared market protocol? If not, why?	Yes. This needs to be focussed on outcomes and easy to implement. Using the shared market protocol should help avoid unnecessary additional development costs.
2. Should stakeholders exchange PQD directly, using NER clause 7.17.1(f)?	Yes.
3. If so, should the Commission prescribe this in the rules, or could this be by agreement between parties?	No comment
QUESTION 15: PRICES FOR POWER QUALITY DATA SERVICES	
1. Is it sufficient for the prices for PQD services to be determined under a beneficiary pays model, especially with a critical mass of smart meters?	While the beneficiary pays model may be considered, the pricing model should take into consideration the roles and responsibilities of the market participants. Typically, in any business, commercial model always varies from customer to customer and with time. It may be most prudent for commercial models to be negotiated directly with a party getting the data from service providers. If a general commercial model needs to be established, then the PQD data exchange model and pipeline should first be finalised before finalising a general commercial model.
2. Are alternative pricing models, e.g., principles-based or prescribing zero-cost access, more likely to contribute to the long term interest of consumers?	As the requirement for delivering this data would falls under MC/MPB/MDP responsibility, and the beneficiary is DNSP, the provision for recovery of service cost must be considered to ensure such changes are not detrimental to the industry.
QUESTION 16: REGULATORY MEASURES TO ENABLE INNOVATION IN REMOTE ACCESS TO NEAR-REAL-TIME DATA SOONER	

AEMC's QUESTIONS	SECURE'S RESPONSE

1. Do stakeholders support the Commission pursuing enabling regulatory measures for remote access to near real-time data? If so, would it be suitable to:
 	
    a. Option 1: require retailers to provide near real-time data accessible by the consumer in specific use cases (while allowing them to opt-out).
    b. Option 2: allow customers to opt-in to a near real-time service via their retailer for any reason.
    c. Option 3: promote cooperation and partnerships between Retailers and new entrants for near real-time data services, e.g., in a regulatory sandbox.
	Yes.
	
	At a technology level, Secure supports that a near-real-time data provision can be considered however commercial impacts should be analysed in detail before a market-wide model is adopted.
	
	The use cases of near-real-time (nRT) are specific to industries or special customer requirements.
	
	There are three key modes of nRT data:
	    a) Over HAN: nRT data available within a local home-area-network (HAN) for immediate customer consumption.
	    b) Over WAN: Available via a centralised system through a wide-area-network (WAN) for customer consumption and/or third-party consumption.
	    c) Trigger based: Inform customers or third-parties when a 'substantial' change in total consumption has taken place. For example, exchanging data say each time '5 KW' is used by the customer. This can be set as a configuration. This approach allows for the right information to be reported in nRT but only when the trigger condition is met.
	
	Each of the above options have some pros and cons associated with the approach. It is suggested to quantify "Near real time data". For example, e.g. every 5/10/15 minute, hourly etc as aspects such as network latency should be considered which can at times hinder high volume data exchange.
	
	A balanced combination of these mechanisms can provide a valued outcome for the customer. A near real-time data facility will typically require increased infrastructure, database and recurring data charges as compared to nightly data delivery.
	
	Hence, our view is that an opt-out mechanism (Option 1), where not all customers will be willing to analyse nRT electricity consumption and usage will lead to increased waste.

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	Secure suggests Option-2 i.e. allow customers to opt-in to a near real-time service via their retailer for any reason. However, customers should also be encouraged to have CAD/in-home devices to allow for direct nRT data for monitoring. We believe the industry will benefit via a combination of Option 2 and Option 3, to ensure services that are being provided to customers remain fit-for-purpose and are commercially viable for the long term.
2. If so, could the Commission adapt the current metering data provision procedures?	This approach would need further detailed consultation with the industry participants. There are many aspects to nRT data that need to be considered on whether this should be included within metering data provision procedures. Current procedures may or may-not be adequate for this purpose. For example, the nRT should not be subjected to substitution/validation as its billing would typically not require real-time data. Hence, the actual data from the meter can be used for decision-making and/or monitoring. Furthermore, consideration of whether RT/nRT data is also required for power quality data or only electricity consumption should be discussed further. Commercial implications of nRT data and the access to such data for third parties will be an assessment undertaken between industry participants.
3. Are there any standards the Commission would need to consider for remote access? E.g., IEEE2030.5, CSIP-AUS, SunSpec Modbus, or other standards that enable 'bring your own device' access.	No further comment. Existing standards may be adequate. As standards are dynamic documents, it is suggested to a general statement such as Any remote access must be in line with the latest cybersecurity and privacy policies.
4. What are the new and specific costs that would arise from these options and are they likely to be material?	Based on the options chosen by the industry (ie. Option 1, 2 or 3), the underlying cost impacts could be substantially different. Generally, cost impacts on the following areas should be considered: - IT infrastructure requirement for increased data processing

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	- Product and system operational maintenance cost including redundancy infrastructure - Future product enhancements including any regulatory change impacts - Network / telco costs for increased and more frequent data delivery - Overall increased system monitoring and manpower If nRT data is considered to be consumed via a home-area-network (local loop), it will typically have a lower cost impact. Consumer can choose to deploy SEP (Smart-Energy-Profile) compliant CAD/in-home devices. These devices can also enable 3rd party Energy Service Companies (ESCOs) to provide value added services – data analytics / Demand Response services / safety / outage management etc.
QUESTION 17: REGULATORY MEASURES TO ENABLE INNOVATION IN LOCAL ACCESS TO NEAR-REAL-TIME DATA SOONER	

1. Do stakeholders support the Commission considering regulatory measures for local access to near real-time data? If so, would it be suitable to:
  a. Define a customer's right in access the smart meter locally for specific purposes?
  b. Outline a minimum local access specification, including read-only formatting and unidirectional communications? Are there existing standards that MCs can utilise, for example, IEEE2030.5, CSIP-AUS, or SunSpec Modbus?
  c. Codify a process for activating, deactivating, and consenting to a local real-time stream? If so, could the Commission adapt the current metering data provision procedures?
	Please refer to above comments

2. Are there any other material barriers that the Commission should be aware of?	No Comment
QUESTION 18: ADDRESSING SHORT TERM COST IMPACTS AND ENSURING PASS THROUGH OF BENEFITS	

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1. Are stakeholders concerned about the risk of short-term bill impacts as a result of the accelerated smart meter deployment? To what extent would the above offsetting and mitigating factors address this risk?	No Comment
2. If stakeholders are concerned about residual cost impacts, what practical measures could be put in place to address these risks?	No Comment
3. What are the implications for AER revenue determinations for the upcoming New South Wales, Australian Capital Territory and Tasmania DNSP regulatory control periods? Is there a risk that network cost savings as a result of the accelerated smart meter deployment will not be fully passed through to consumers under the regulatory framework?	No Comment