



Clean Energy Council submission to the Australian Energy Market Commission Consultation Paper: Review of the Regulatory Framework for Metering Services

The Clean Energy Council (CEC) welcomes the opportunity to provide feedback on the Australian Energy Market Commission (AEMC) Consultation Paper for the review of the regulatory framework for metering services.

The Clean Energy Council is the peak body for the clean energy industry in Australia. We represent and work with Australia's leading renewable energy and energy storage businesses, as well as rooftop solar installers, to further the development of clean energy in Australia. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

The *Competition in metering* policy has been a major disappointment. The rollout is too slow and at the current rate it will not be complete until the 2040s. The failure of metering policy in the National Electricity Market (NEM) undermines the prospects for other important reform initiatives, including tariff reform, improving network visibility and increasing hosting capacity cost effectively.

Metering can play a dual role, providing public benefits (e.g. improving network visibility and hosting capacity and enabling tariff reform) and private benefits (e.g. optimizing consumption profile and reducing electricity bills).

If meters are primarily for private benefits then continuing with a slow, voluntary rollout is fine and there is no pressing need for policies or other intervention by the AEMC.

The CEC believes that smart meters can deliver important public benefits and the role of the AEMC should be to focus on the public benefits of the smart meter rollout, rather than the private benefits. To enable the public benefits to be realised, the framework for data access should be revised as follows:

- customers should have access to their data, and it should be easy for them to assign access to their data to third parties, such as aggregators, and
- distribution network service providers (DNSPs) should have access to voltage data.

If the AEMC values the public benefits of improved metering, then there is a role for government in speeding up the rollout. e.g., by setting a target backed by regulation and financial penalties. Otherwise, the disappointingly slow meter rollout will continue to undermine the likelihood of success of other important reform initiatives, like tariff reform and improving network visibility.

We would be happy to discuss these issues in further detail with representatives of the AEMC. We look forward to contributing further to this important area for policy development.

Why the failure of metering policy matters and what needs to be done about it

The *Competition in metering* policy has failed. Its failure is evidenced by the unacceptably slow roll out of advanced metering. The failure of the metering policy is doubly problematic because metering underpins other reforms. Tariff reforms, for example, are being impeded by the failure of metering policy.

The projected rate of smart meter uptake under current policy settings are unacceptable. Waiting until the 2040s is not good enough. It is a problem because smart meter rollout is crucial for success of some other reforms. It has the nature of a public good insofar as it underpins other reforms that have wide public benefits – like tariff reform and network visibility.

The CEC supported the distributor-led roll out of smart meters in Victoria and we argued against the *Competition in metering* proposal and rule change.

If the AEMC values the public benefits of improved metering, then there is a role for government in speeding up the rollout. e.g., by setting a target backed by regulation and financial penalties.

As well as speeding up the rollout, there is a need to enable access to smart meter data by aggregators and DNSPs. DNSPs should have access to voltage data from smart meters. This would go a long way toward solving the problem of DNSPs' poor visibility of their network. Customers should have access to their data, and it should be easy for them to assign access to their data to third parties, such as aggregators.

RESPONSES TO QUESTIONS FOR STAKEHOLDERS

Q1 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 yet identified?

Yes. There are several other reforms that the AEMC should consider.

In 2020 the South Australian (SA) Department for Energy and Mining (DEM) introduced new regulations requiring that all new or replacement meters must be multi-element and all new distributed energy resources (DER) connecting to the SA Power Networks grid must utilise a multi-element meter. It is unclear whether any other jurisdictions will follow this approach however, it could soon be made redundant by the reforms recently proposed by Energy Queensland, which will introduce dynamic customer connections for DER, using an application programming interface (API) consistent with the IEEE 2030.5 standard for communications protocols. It would be helpful for the AEMC to review the usefulness of the SA reforms in relation to multi-element meters and whether this approach should be considered elsewhere.

The CEC's view is that regulators should require capabilities rather than mandating specific technologies. If dynamic customer connections can be achieved using inverters communicating with DNSPs' APIs this would be a superior solution to mandating the use of multi-element meters. Dynamic customer connections will have the capability to support dynamic operating envelopes whereas a multi-element meter will be limited to a simple disconnect and reconnect function.

1.2: Is there additional related work that the Commission should consider in this metering review?

Yes. The AEMC should consider where metering plays a pivotal role to enable other reforms. For example, metering plays a pivotal role in enabling tariff reform. Cost-reflective tariffs cannot be implemented on customers with accumulation meters. Tariff reform cannot be introduced across the entire market until there is metering to support it.

There are also equity considerations arising from the current approach. The main drivers of the metering rollout have been requirements placed on new connections and for installation of DER. It is inequitable to place the cost burden on metering investments on this limited customer cohort. It is doubly inequitable for cost-reflective tariffs to only be imposed on customers who have been forced to upgrade their meter.

Q2: ASSESSMENT FRAMEWORK

Do you agree with the Commission's proposed assessment framework for this Review? Are there any additional criteria we should consider as part of this framework?

The assessment framework is focused on assessing processes. The AEMC should also assess results. Are the results of the current rollout acceptable? Is a timeframe of decades acceptable?

The assessment also needs to take a systemic view, considering where the failure of the rollout is impeding other reforms. Although this is noted in the Consultation Paper, it is not included in the assessment framework. It should be.

The assessment framework could also take account of equity considerations. Is it appropriate that a limited section of the market is being required to finance the metering rollout? Is it acceptable that cost-reflective tariffs can only be imposed on customers with advanced metering? Does this result in unintended consequences? (e.g., are customers avoiding meter upgrades to avoid cost-reflective tariffs?)

Q3: EXPECTATIONS OF METER ROLL OUT

3.1 How does the roll out of smart meters to date compare with your expectations?

Our expectations of the voluntary approach under the *Competition in metering* policy were very low. Sadly, we were correct to have very low expectations. More than a third of new smart meters are being paid for by customers who are required to as a condition of connecting DER. Very few customers request a smart meter because they want a smart meter per se. They request a smart meter because it is a mandatory requirement of a new connection or for installation of DER.

3.2 Is the current pace of smart meter deployment appropriate? What should be the appropriate pace of rollout?

The current pace of rollout is inadequate. A 100% rollout by 2025 would enable implementation of cost-reflective tariffs for all customers in the next regulatory period for DNSPs in the NEM. Imposing cost-reflective tariffs on a relatively small subset of the market will be inefficient, inequitable and more likely to encounter resistance. Main policy makers pay lip service to the importance of tariff reform and fail to consider how the failure of the metering rollout is a barrier to tariff reform.

3.3 What benefits are smart meters providing consumers? Have the benefits changed or improved over time?

Smart meters are a mandatory requirement for the installation of new DER systems. One of the most significant benefits of installing a smart meter is that it allows customers to connect DER or it allows customers to obtain a new connection or it allows customers to replace a faulty meter. These reasons account for more than 80% of all new meter installations.

Even though the smart meter rollout was completed in Victoria many years ago, there have been limited visible benefits for customers except for the recent availability of energy retailer online portals.

Q4: ARE INCENTIVES IN THE RIGHT PLACE?

4.1 Are the incentives in relation to smart meter roll out correct? Please provide details on why / why not.

The smart meter rollout is being driven by compulsion, not incentives. The compulsion is in the wrong place. The compulsion sits with owners of new connections and new DER systems. This accounts for more 60% of new smart meter connections. The regulatory framework should not single out a relatively small group of customers for the mandatory meter requirements. If there are public benefits to be had from a 100% rollout of meters, then the obligation and costs should be spread across all customers. If the AEMC is not setting out to capture the public benefits of a 100% rollout, then the rationale for mandating smart meters for any group of customers is weakened and there would be a stronger case for moving to an entirely voluntary system.

Q5: DRIVERS OF SMART METER ROLL OUTS

5.1 What were your expectations regarding the drivers of smart meter roll outs?

It was our expectation that very few customers would choose to acquire a smart meter for its own sake and that most of the uptake would be driven by the compulsion placed on new connections and connection of new DER systems.

5.2 Has there been any changes in the overall reasons for installing smart meters since the *Competition in metering* rule commenced?

The main reasons customers install smart meters is because they are required to as a step toward achieving something they really want – such as a new connection or connection of a new DER system. This has not changed.

Since the *Competition in metering* rule commenced, some DNSPs have introduced new tariffs that use the installation of a smart meter as the trigger for tariff reassignment. This is a disincentive for smart meter uptake. Few customers want their life to be made more complicated by having to deal with more complex electricity tariffs.

5.3 Which parties should be responsible for driving the roll out of smart meters?

The electricity retailers lobbied for responsibility for the smart meter rollout during consultation around the *Power of Choice* reforms. If compulsion is placed on market participants, it should be on the retailers. This would be fairer and quicker than placing the obligation on a relatively small group of customers, which is currently the case.

The CEC had originally supported a DNSP-led rollout of smart meters. There are some compelling arguments for that approach. For example, the smart meter rollout in Victoria means that Victorian DNSPs have better visibility of their low voltage (LV) networks than their counterparts in other jurisdictions. Unfortunately, we understand that many DNSPs in the NEM are of the view that the metering system is 'broken' and they do not want to now be given responsibility for fixing it.

The Victorian DNSPs' access to smart meter data has also enabled the Victorian Essential Services Commission to meet its obligations to regulate voltage management by DNSPs. In other states and territories, regulators struggle to regulate voltage management because they and the DNSPs they are supposed to regulate do not have access to the information they need at a price they consider acceptable.

5.4 Do consumers have clear information on the benefits of smart meters and their rights relating to requesting a smart meter?

The private benefits of a smart meter can be better accessed using alternatives provided by inverter suppliers or companies such as Solar Analytics. A customer does not need a smart meter to obtain the private benefits associated with them. The AEMC should be focused on the public benefits of metering, rather than the private benefits. There is an important role for government in driving metering for public benefits. The role for government in driving metering upgrades for private benefits is less clear. Conflating private and public benefits simply confuses the policy approach. If we were only concerned about the private benefits of metering, then we could remove all compulsion and leave it to customers to choose whether and when they want a new smart meter.

Q6: CONSUMER EXPERIENCE

What are your views on the customer experience in relation to smart meter roll out and installation?

The current framework for metering makes the energy retailer the gatekeeper for the smart meter and its data. A customer or their service provider can only access this data via their electricity retailer and only in the timeframe and format determined by the retailer. Electricity retailers are conflicted in this role as they have a financial interest in preventing release of data to third parties where that could threaten their business model.

Customers should have access to their data, and it should be easy for them to assign access to their data to third parties and service providers, such as aggregators. This data should be able to be received by the service providers in an automated near real time manner, with a fully online digital sign up process. This would require the electricity retailer or Meter data providers to provide secure access to data via an application programming interface (API).

Q7: INDUSTRY COOPERATION

7.1 Do you have any suggestions on how industry cooperation can be improved?

One of the most significant barriers to better utilisation of smart meter data is the power exerted by electricity retailers regarding data access. Access to the data from smart meters should not be dependent on electricity retailers' cooperation. The framework for data access should be regulated. DNSPs should have access to voltage data from smart meters to enable network visibility at low cost to DNSPs and their customers. The regulatory framework should limit electricity retailers' monopoly powers over data by enabling customers to easily assign data access to service providers without obstruction.

The Consultation Paper cites New South Wales (NSW) as an example of where industry cooperation has been disappointing. Based on anecdotal accounts, we understand that the NSW smart meter system is more hideously byzantine than in other jurisdictions. There may be some value in considering how the rules impede industry cooperation and lessons that NSW can learn from other jurisdictions.

7.2 Are changes to the market structure or roles and responsibilities needed to improve the consumer experience?

Yes. DNSPs should have access to voltage data from smart meters either free of charge or for a low, regulated fee determined on a cost-recovery basis.

Customers should be able to assign data access to service providers and electricity retailers should be prevented from obstructing such requests.

Q8: EXPECTATIONS OF METERING SERVICES

8.1 What expectations did you have around the services that smart meters would provide? Were your expectations met?

The AEMC is framing the issue incorrectly by focusing on the private benefits of metering services. The rationale for smart meters was the public benefits, not private services.

The main expectation was that a successful smart meter rollout would lead to successful tariff reform. Instead, we have a slow and partial rollout which only allows cost-reflective tariffs to be imposed primarily on the customers unfortunate enough to be required by regulations to install a smart meter.

Our expectation of a successful smart meter rollout enabling successful tariff reform has not been met. It is also disappointing that lack of visibility by DNSPs of their LV network is being encountered as a barrier to voltage management. The AEMC should amend the regulatory framework to enable DNSPs to access voltage data from smart meters while maintaining customers' privacy.

8.2 What services are being provided by smart meters currently? Are these services widely available?

The AEMC should leave it to the market to think about private benefits of metering. The industry needs policy makers to address the public benefits and the role for government. There is no need for AEMC policy to drive private benefits of metering. We need you to address the public benefits side of this equation.

8.3 What services did you expect from smart meters which have not eventuated?

The services we had hoped for and which have not eventuated are enabling tariff reform and improving network visibility of the LV network. Other services from metering do not require a policy driver.

8.4 Are there any services provided by smart meters which were not anticipated at the time of the *Competition in metering* rule change?

Victorian DNSPs have been able to use data from smart meters to improve network management. The availability of the data allows the Essential Services Commission to regulate voltage management by DNSPs at a level of sophistication that would be unthinkable in jurisdictions that are subject to competitive metering.

It is unclear whether the *Competition in metering* rule change overlooked these benefits or if they were understood but discounted.

Q9. COLLECTION AND USE OF METERING DATA

9.1 In relation to metering data, what data should be captured by smart meters and why?

It would be helpful to distinguish between data for private benefits and data for public benefits. There is no need for the AEMC to regulate capture of data for private benefits. There are many companies better placed to do that. The AEMC should focus on what data is required for public benefits and who needs access to that data.

9.2 In relation to metering data, who should be able to access metering data, and how? What protections should be in place?

The AEMC should enable DNSPs and regulators of DNSPs to have access to voltage data from smart meters, with protections for customer privacy. Voltage data is crucial for network management and the regulation of network management.

9.3 What impact do you think the Consumer Data Rights may have on the access to, and use of, metering data?

The Consumer Data Right will not allow DNSPs to have access to voltage data. We need the AEMC to make that happen.

Q10: FUTURE METERING SERVICES

10.1 What is your understanding of other services that smart meters can provide?

The AEMC should not be focusing on the full range of private benefits that metering can provide to customers, whether the data is obtained from smart meters, inverters, gateway devices and other technology. The AEMC should focus on the data that is needed for public benefits (such as network management and increasing hosting capacity) and enabling access to those who need it (e.g., networks' access to voltage data). The market can provide customers with additional services for private benefit and this does not require new policies and regulations by the AEMC.

10.2 What future services do you expect or want metering to facilitate?

The AEMC should focus on reforming the regulatory framework to enable the data that is currently available to be used by those who need it. There is no need for the AEMC to be contemplating regulation of future services. Please fix the mistakes of the past first.

10.3 If additional services are to be provided by smart meters, how should the costs of providing those services be allocated?

Currently, the costs of new smart meter installations are borne primarily by a relatively small proportion of customers who are obliged to install them as a condition of obtaining approval for a new connection or a new DER system. This is inequitable, inefficient and has led to a rollout that is far too slow. To the extent that there are public benefits in a widespread rollout of smart meters, there is a rationale for smearing rollout costs over the entire customer base.

Q11: 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?

The very slow and partial rollout of smart meters is impeding tariff reform. Where cost-reflective tariffs are being introduced, they are being imposed on customers who have a smart meter while customers who choose not to upgrade their meter are able to enjoy the continuation of flat tariffs. This is inefficient and inequitable. It is a disincentive to installation of smart meters. In general, customers do not want to pay for a smart meter, and they do not want their life to be made more complicated by having to manage more complex tariffs.

Equitable and meaningful tariff reform requires a 100% smart meter rollout. Tariff reform has the potential to reduce network costs, with benefits for all customers.

Network visibility would not require a 100% rollout. Improving network visibility does not require the rollout to be sped up. All it requires is for the AEMC to allow DNSPs to have access to voltage data.

11.2 What other factors are important in determining whether the provision of particular services are efficient or effective (e.g. geographic spread)?

As noted in the Consultation Paper, geographic spread is important to enable smart meters to be able to provide useful data on the LV electricity network. Even more importantly, the regulations need to be changed to allow DNSPs to have access to the voltage data. Without that access, the geographic spread of the smart meter rollout is irrelevant.

Q12 ENCOURAGING THE ADOPTION OF SMART METERS AND FUTURE SERVICES

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?

No. For all the reasons outlined above, the current regulatory framework for smart meters is a failure.

12.2 To encourage higher adoption of smart meters:

a. What changes, if any, need to be made to the current regulatory framework for future services?

We do not need the AEMC to regulate future services. It would be enough if the AEMC could amend the regulatory framework to ensure that customers can assign data access to their service providers without obstruction by electricity retailers and that DNSPs have access to voltage data.

b. What changes, if any, need to be made to other instruments? (e.g. regulatory instruments, guidelines, codes)

If the AEMC agrees that a 100% rollout of smart meters should be the goal of its policy, then it should consider introducing targets backed by regulation with financial penalties or incentives for compliance.

12.3 Are there other avenues of encouragement that are available that the Commission has not considered in this paper?

Yes. The AEMC should consider regulation rather than “encouragement”.

Q13 BARRIERS TO REALISING THE BENEFITS OF SMART METERS

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?

Yes. DNSPs in the NEM (apart from those in Victoria) are unable to access voltage data and this is a significant impediment to improving network visibility and hosting capacity on distribution networks.

13.2 What changes, if any, need to be made to the current regulatory framework for current arrangements to improve deployment?

The current framework only mandates smart meter installation for a limited proportion of the market. The rate of rollout has been abysmal for that part of the customer base that is not obliged to install a smart meter. If the AEMC values the public benefits of a widespread smart meter rollout then it could consider introducing a degree of compulsion into the regulatory framework, possibly with enforceable targets. If this reform is not important enough to warrant introducing enforceable targets then it would be reasonable and equitable to remove all compulsion for smart meter installation for all customers, including new connections.