

12 December 2024

Zak Rich
Australian Energy Market Commission
GPO Box 2603 Sydney 2000
Submitted electronically via aemc.gov.au.

#### Consultation feedback on the Pricing Review

Dear Zak,

Thank you for the opportunity to provide feedback on the Consultation Paper for the Australian Energy Market Commission (AEMC) *Electricity pricing for a consumer-driven future* review.

As you may be aware, SMA is a global inverter manufacturer with headquarters in Germany and an installed inverter capacity of more than 132 GW in almost every country in the world and more than 9GW inverter capacity in the Australian market. Our product range spans the consumer energy resources (CER) sector, commercial and industrial applications, and large grid-scale applications.

It is appropriate to place consumers at the centre of the approach towards the review. We also urge you to ensure that the review considers regulatory barriers to better use of energy storage on distribution networks. Even though residential consumers may be unlikely to directly interface with utility-scale batteries on distribution networks, they will directly benefit from reforms to remove barriers to more use of batteries at the distribution level.

We urge you to use this review as an opportunity to ensure there is a 'level playing field' for tariffs available utility-scale batteries. Our customers include developers of utility scale batteries on transmission networks. They have told us that they would be keen to develop grid-scale battery projects on sub-transmission and high voltage distribution networks. They are not doing so at present because the business case is hindered due to the Network Use of System (NUoS) tariff regime. An uneven playing field exists between transmission-connected batteries and those connected to sub-transmission and high voltage distribution networks.

We have included a submission which responds in more detail to the questions raised in the Consultation Paper. SMA-Australia's head of Energy Policy and Regulation, Darren Gladman, will continue liaising with you on our behalf.

We look forward to working with you as the review progresses.

Best regards,

Doris Spielthenner SMA Australia

Regional Manager APAC & Managing Director Australia & NZ



#### Responses to questions raised in the Consultation Paper

### Question 1: Do you consider that we should make any changes to our proposed approach to this review?

We do not have any recommended changes to the proposed approach. It is appropriate to place consumers 'at the centre'. We also urge you to ensure that the review considers regulatory barriers to better use of energy storage on distribution networks. Even though residential consumers may be unlikely to directly interface with utility-scale batteries on distribution networks, they will directly benefit from reforms to remove barriers to more use of batteries at the distribution level.

#### Question 2: What are your views on the proposed Consumer Preference Principles?

#### a) Are you aware of additional research that could help us refine the CPPs?

We do not have any recommendations regarding additional research that could help to refine the CPPs.

### b) How might the CPPs help us in assessing whether our decisions will lead to good consumer outcomes?

The CPPs could be useful in predicting possible consumer responses to external conditions, all other things being equal. They could also assist the policy development process by ensuring that policies are designed using a more grounded concept of consumer preferences, including that there is no single archetype that adequately represents the preferences of every consumer.

#### Question 3: What are your views on the proposed Consumer Archetypes?

#### a) Do the Consumer Archetypes capture the diversity of future energy consumers?

The Consumer Archetypes focus on the attributes of consumers, specifically their interest in engaging and their resources to engage. This is a useful way of thinking about consumer attributes.

# b) Do you agree that engagement is the primary access of differentiation among electricity consumers?

Focusing on engagement is a useful starting point. However, focusing on the resources and interests of the consumer <u>alone</u> risks overlooking the impact of external conditions on consumer options and preferences. For example, many rural and remote consumers would have lived experience of regular or prolonged outages whereas many city-based consumers might never have experienced a blackout. The difference in external conditions and their lived experiences could mean there are differences in preferences and behaviours that are not adequately captured by assuming that the consumer's interests and resources are the sole or even the most significant determinant of their likely behavioural response to electricity pricing.



# Question 4: We want stakeholders to help us imagine the widest range of possible future products, services, and pricing structures. How might they look in future?

## a) How have products and services evolved in similar markets that were disrupted by new technologies, for example, in telecommunications and point-to-point transport?

Electricity is different to every other product and market because of its crucial distinguishing feature, which is that supply and demand on the grid need to be constantly kept in balance. Despite that difference, there are changes in the telecommunications and point-to-point transport sectors that are an indicator of future trends in electricity. Some of the key trends likely to affect electricity supply are:

- All CER will be internet-enabled.
- Developments in communications and information technology (IT) will be increasingly important for the electricity sector, especially for CER,
- More connectivity will increase cyber security risks,
- Data breaches are likely to occur, and this will help to drive the uptake of enhanced cyber security measures,
- Regulators will act on cyber security risks,
- We expect emerging concerns regarding protection of the privacy of consumer energy data to also receive more attention in future.

#### b) What new innovations are we starting to see in current offerings?

Some new offerings in recent years have included:

- New tariffs (e.g. wholesale spot market exposure for residential customers who want it),
- Virtual power plants (VPPs),
- Flexible limits on exports and imports,
- Solar power purchase agreements (PPAs), and
- Energy storage as a service.

Further new offerings are expected to emerge as vehicle-to-grid technologies mature and are brought to market.

c) What electricity products and services are available internationally that aren't available here?

Vehicle-to-grid integration is more advanced overseas than in Australia.

d) Which technological trends may impact the electricity market, beyond those already discussed in this paper?



In addition to the trends discussed in the paper, we expect the trend towards increasing internet connectivity will drive a need, and recognition of the need, for enhanced measures for managing cyber security risks and for protecting the privacy of customers and their personal energy data.

#### e) What types of pricing structures might align well with the proposed Consumer Pricing Principles?

The types of pricing structures that might align well with the proposed Consumer Pricing Principles would not require engagement but would give customers the option of engagement where that aligns with their circumstances and their preferences.

### Question 5: How could electricity products, services, and pricing structures be presented to serve future consumers?

Products, services, and pricing structures could be presented as:

- A default electricity product that is simple to understand and suitable for customers who are unable
  or do not wish to engage deeply with the market, and
- Availability of more complex products and services provided on an 'opt in' basis for customers who
  either wish themselves to engage more deeply with the market or who are able and comfortable for
  an authorized representative to engage on their behalf.

It will be important to acknowledge that a pricing structure that allows complexity for those customers who want it does not diminish the need for policy makers and regulators to provide consumer protections and enforce minimum standards, especially in areas that require systemic changes.

# Question 6: How could consumer protections be balanced to enable further innovation in a future retail electricity market?

They could be balanced by agreeing on:

- A minimum set of standards, codes, and regulations that apply to all electricity offers, regardless of the customer type,
- An additional set of standards, codes, and regulations that apply to 'default' electricity products for customers who are unable or do not wish to engage deeply with the market,
- A process to monitor developments in the 'opt in' electricity product market to identify when unanticipated consumer issues emerge and to enable consideration of steps to address them.

The framework for the 'opt in' market should be relatively 'light touch' with an emphasis on identifying and addressing unanticipated consumer issues as they emerge, rather than trying to design a framework that prevents any issues from emerging.



Question 7: What barriers will need to be addressed to deliver future consumers a meaningful and beneficial range of products, services, and pricing structures? How might we consider addressing those barriers?

# a) Consider the changes that are happening in the system now – what barriers might either endure or emerge post 2035?

A key barrier of concern to some of SMA's customers who invest in energy storage is the uneven regulatory playing field between batteries on transmission networks versus batteries on distribution networks.

We urge you to use this review as an opportunity to ensure there is a 'level playing field' for tariffs available utility-scale batteries. Our customers include developers of utility scale batteries on transmission networks. They have told us that they would be keen to develop grid-scale battery projects on sub-transmission and high voltage distribution networks. They are not doing so at present because the business case is hindered due to the NUoS tariff regime. An uneven playing field exists between transmission-connected batteries and those connected to sub-transmission and high voltage distribution networks.

#### Question 8: What should network tariffs look like in the future?

# a) What are the key choices and trade-offs we should consider when answering this question?

We urge you to use this review as an opportunity to ensure there is a 'level playing field' for tariffs available utility-scale batteries.

Developers of transmission-connected batteries can negotiate access to the transmission network as a negotiated service. The price is subject to negotiation with the transmission network service provider (TNSP) and the revenue from such negotiated services is additional to the TNSP's revenue cap determination. In contrast, developers of grid-scale batteries connecting to distribution networks must pay a distribution network tariff that covers the NUoS charges in the Tariff Structure Statement (TSS) of the distribution network service provider (DNSP). In many situations a distribution-connected battery would deliver better results for customers and the electricity system but the uneven tariff treatment favors investment in transmission-connected batteries. The best approach to resolve this issue is likely to be for the review to recommend a Rule Change process that considers an expansion of the current treatment for transmission connected assets (in respect of network charges) to distribution and sub-transmission connected assets.

We also note that another barrier to investment in batteries on distribution networks is the regulatory uncertainty regarding the role of DMSPs in the ownership and operation of batteries on distribution networks. The use of ring-fencing waivers for individual projects compounds the uncertainty. The best way to encourage private investment in the long term would be to clarify either that DNSPs are permitted to own and operate batteries on distribution networks, or to clarify that DNSPs are not permitted to own and operate batteries on



distribution networks. A process of individual waivers by the AER provides no policy certainty and is probably the worst possible approach to encourage long term investment. Regardless of whether the AEMC ultimately decides to allow DNSP ownership and operation, or not, it would be helpful for the AEMO to clarify that this is a matter of policy which is to be implemented through the National Electricity Rules (NER) and the usual process of review and rules changes, and it is not a matter of interpretation of the NER which is to be implemented on a project-by-project basis by the AER.

# Question 9: How should the role of energy supply businesses evolve to meet customer and energy system needs in future?

We expect one of the most significant changes will be that energy supply businesses will in future be far more focused on technology and use of artificial intelligence in the home, compared with today. Artificial intelligence applied to customer energy data will used to understand, predict, and potentially modify behaviours.

# Question 10: What changes might be required in the future in the interfaces between different energy supply businesses?

The interfaces between different energy supply businesses will become more data dependent. There are policy decisions to be made regarding:

- the extent to which data provision is mandatory or 'opt in',
- which data is required on a mandatory basis and who provides it to whom,
- who specifies the form and frequency of the data required on a mandatory basis,
- who decides which data provision is mandatory and the appropriate form and frequency of the data required on a mandatory basis, and
- the potential role for the proposed AEMO CER Data Exchange.

#### Question 11: Do you have any feedback on our proposed assessment criteria?

The proposed assessment criteria seem reasonable.