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**AEMC Ref: EPR0097**

Ms Anna Collyer  
Chair  
Australian Energy Market Commission

*By online submission*

**RE: SUBMISSION TO THE CONSULTATION ON THE ELECTRICITY PRICING FOR A CONSUMER-DRIVEN FUTURE**

Dear Ms Collyer,

We welcome the opportunity to provide a submission to the market review on the electricity pricing for a consumer driven future.

**ABOUT**

Kraken, the software platform of the Octopus Energy Group, connects all parts of the energy system, from customer billing to flexible management of renewable generation and energy assets. It is also redefining service for utilities such as water and broadband. Kraken optimises and controls utility-scale and behind-the-meter distributed energy resources (DERs), such as solar, wind, batteries, electric vehicles and heat pumps, in real time and at scale. This helps to balance the grid and enables customers to benefit from cheaper, greener power. Kraken currently hosts over 63 million customer accounts and manages approximately 50 GW of energy assets in 18 countries across the world.

**OUR SUBMISSION**

This market review is occurring at a vital moment in our decarbonisation journey of the electricity grid. As electrification has emerged as the leading decarbonisation strategy, network operators are making substantial investments into renewable generation technologies and their grids. With these investments set to accumulate rapidly, we must strive to maximize their efficiency. The AEMC has a pivotal opportunity to redefine future energy market design by unlocking the full potential of consumer flexibility and integrating it into an evolving energy system. To support the Commission as part of this review, we make the following submission:

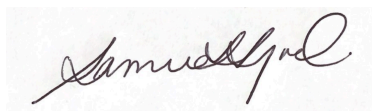
- **We must prioritise the consumer experience:** We commend the Commission for emphasising consumer principles and archetypes as a foundation for this review. However, we believe the proposed focus on “engagement” alone is insufficient to drive meaningful consumer participation in energy programs or support informed purchasing decisions. Our experience in developing energy products and services across markets highlights the importance of prioritising the customer experience. A consumer-centric approach involves understanding the entire journey - how customers engage, participate, and eventually exit a product or service - offering deeper insights than engagement alone. The Energy Security Board (ESB), through its Consumer Insights work program, has already underscored the crucial role of consumer experience in shaping effective

policy frameworks, particularly for emerging energy services. As part of this work the ESB examined the critical barriers for consumers engaging with new energy services, which provided deep insights into why certain consumers were prevented from engaging in these services. We strongly encourage the Commission to leverage these insights to guide the outcomes of this review, ensuring that reforms truly meet consumer needs and expectations.

- **Dynamic tariffs benefit consumers and the grid:** We encourage the Commission to consider the efficacy of dynamic network tariffs and pricing to better reward consumer flexibility. There is strong evidence that dynamic network tariffs (tariffs where pricing of load and generation aligns with real-time network conditions) provide the most optimal value for consumers.<sup>1</sup> These tariff structures can also provide additional value for network operators. While we acknowledge that such tariff arrangements can potentially add additional complexity to a customer's retail experience, we believe that these issues can be appropriately managed to the benefit of customers, retailers and networks. We have found that in markets with appropriate price signals, the automated management of DER can enhance the consumer experience and unlock substantial value for all stakeholders.
- **We need to prioritise roles and responsibilities:** Defining clear roles and responsibilities for the control of Consumer Energy Resources (CER) is essential to unlocking the full value of consumer flexibility. Successful examples, both domestic and internationally, demonstrate how collaboration between network operators and retailers can deliver the best outcomes for consumers. However, before adopting a specific model, it is crucial to establish a shared understanding of the roles and responsibilities energy supply businesses will undertake in delivering new energy services within the market. This consensus will ensure alignment and clarity as the energy system evolves.

We thank the AEMC for the opportunity to raise these points with the Commission on this important review. We have included detailed responses to the consultation questions in the appendix for further clarity. If you would like to discuss our submission in further detail please do not hesitate in contacting me via [sam.lynch@kraken.tech](mailto:sam.lynch@kraken.tech).

Yours sincerely,



Sam Lynch  
**Policy & Regulatory Manager - APAC**

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<sup>1</sup> Berenschot (Netherlands), 'Exploration of alternative grid tariffs system for small consumption', 21 October 2024. Accessible [here](#).

## APPENDIX: RESPONSE TO CONSULTATION QUESTIONS

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| <b>Question 1</b>      | <i>Do you consider that we should make any changes to our proposed approach to this review?</i> |
| <b>Kraken Response</b> | Kraken has no objection to the proposed approach for this review.                               |

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| <b>Question 2</b>      | <p><i>What are your views on our proposed Consumer Preference Principles?</i></p> <ul style="list-style-type: none"> <li>• <i>Are you aware of additional existing research that could help us refine the CPPs?</i></li> <li>• <i>How might the CPPs help us in assessing whether our decisions will lead to good consumer outcomes?</i></li> </ul>   |
| <b>Kraken Response</b> | <p>We support the Commission’s suggested Consumer Preference Principles (CPPs) and believe they have been appropriately scoped to inform robust decision-making. We do not believe that it is overly helpful or effective to focus on prescriptive principles that while important may only deal with fringe issues or themes.</p> <p>We believe the CPPs will serve as helpful prompts to guide the consultation and inform outcomes. As the review is addressing a wide and complex range of subject matter, there is a need to focus our efforts on the issues that are of most significance to consumers. Of course there will, at times, be a number of competing outcomes that need to be resolved. However, we believe that these challenges can be mediated through assessing outcomes against the CPPs.</p> <p>The extent to which the review will contribute to ‘good consumer outcomes,’ such outcomes should be measured not only on the application of the principles to various scenarios, but also against the willingness of industry to recognise and embrace the opportunities associated with consumer flexibility. The review may potentially produce outcomes that, while seemingly advantageous for consumers, may conflict with industry or market expectations, thereby leading to their rejection or lack of adoption. To this end, it is recommended that the Commission clearly articulate the overarching purpose of the review to foster alignment and secure the necessary support from all stakeholders across the sector.</p> |



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| <b>Question 3</b>      | <p><i>What are your views on our proposed Consumer Archetypes? For the purposes of this review:</i></p> <ul style="list-style-type: none"><li><i>• Do the Consumer Archetypes capture the diversity of future energy consumers?</i></li><li><i>• Do you agree that engagement is the primary axis of differentiation among electricity customers?</i></li></ul>   |
| <b>Kraken Response</b> | <p>We are broadly supportive of the proposed Consumer Archetypes. We agree that consumer products and services are most effective in circumstances where the consumer is engaged and has the resources to participate. However, we are concerned that this approach may oversimplify the consumer experience and underestimate the barriers to participation. For example, a consumer in public housing may lack sufficient resources to invest in CER but may be able to benefit significantly through state government investment at their premises. To address the spectrum of differing ‘consumer’ perspectives and needs, the products or services must be multi-faceted.</p> <p>Notwithstanding, a highly engaged and resourced individual may have limited opportunities for participation due to features completely outside their control. For example, we have experienced firsthand the negative impacts for consumers of Original Equipment Manufacturers (OEMs) restricting API access, making it harder for Kraken clients to provide the full range of benefits for their customers. Applying this example to the experience of an Australian customer may involve a consumer purchasing a heat pump and home battery but where the OEMs have granted API access to different suppliers. This is an unsatisfactory outcome for the consumer as they would be unable to optimise both devices with the same supplier. This also has an impact on the grid as network operators are not receiving the reliability/resilience benefit from optimising both devices. It is therefore important to consider the <i>experiences</i> of consumers when considering how they engage with energy products/services.</p> <p>We do not disagree that engagement is an important axis of differentiation among electricity consumers, there will be instances whereby consumer outcomes will be impacted beyond their level of ‘engagement’. These <i>experiences</i> should be given equal consideration in the archetypes.</p> |



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| <b>Question 4</b>      | <i>We want stakeholders to help us imagine the widest range of possible future products, services, and pricing structures. How might they look in the future?</i>  |
| <b>Kraken Response</b> | <p>Australia is in a strong position to take full advantage of the energy transition and electrification of households. However, as this review rightly identifies, there needs to be a shared understanding across industry of what successful consumer flexibility looks like. We know from our experience that consumers expect more than just incremental value from third parties controlling their resources.</p> <p>To ensure consumers are provided with an optimal experience, it is incumbent on industry to design products and services that are fit-for-purpose. Markets around the world are beginning to innovate with different products and services that reward consumer flexibility. Kraken has enabled retailers, utilities and networks to develop such innovative products to help unlock value from consumer resources. Examples include:</p> <ul style="list-style-type: none"><li>● <b>Intelligent Octopus Resi-Flex:</b> Octopus Energy NZ currently provides a rebate to consumers for enabling dynamic control of their EV charger. As part of the arrangement, distribution networks provide a 5c per kWh rebate on all managed EV charging that is being delivered through Intelligent Octopus. The program is being delivered as part of a trial that aims to test the effectiveness of commercial mechanisms to solve network use cases. More details can be found <a href="#">here</a>.</li><li>● <b>Intelligent Octopus Go:</b> Octopus Energy UK has managed to enrol 1 GW of EV batteries via its intelligent Octopus Go tariff. Intelligent Octopus Go customers are able to input their charging preferences and Octopus is able to optimise the vehicle charging around low price periods. Over 250,000 EVs are currently operating in the UK on Octopus Energy's smart tariffs saving consumers on average \$1,204 AUD (£600) per year.</li></ul> <p>Initiatives such as those highlighted above range in their level of technological sophistication. However, each of these programs provide an important insight into how all consumers can participate in flexibility so long as they are simple, easy to understand and integrate seamlessly into their lived experience.</p> |

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| <b>Question 5</b>      | <i>How could electricity products, services, and pricing structures be presented to serve future consumers?</i>  |
| <b>Kraken Response</b> | <p>In order to ascertain the optimal way to present information to consumers, it is essential to understand the consumer experience. Specifically, the information (1) required to inform or make a purchasing decision; (2) required when engaging with the product or service; and (3) necessary for the cessation/switching of a service. Various programs provide comparisons of electricity products which largely inform purchasing decisions for a customer shopping for a supplier. However, enabling product comparison for DER based/consumer flexibility arrangements may add additional complexity to the comparison process. This should not prevent the Commission from exploring ways to enable simple product comparisons. Indeed in markets such as Texas there is a ‘Power to Choose’ comparison website where intelligently optimised DER products appear alongside all other plans and are not separately compared.</p> <p>Based on our experience, customers value simplicity. While customers can be presented with a wealth of information, much of it may offer minimal or no real value to their experience. Striking the right balance is challenging and often needs to be adjusted to meet the specific requirements of each client.</p> |

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| <b>Question 6</b>      | How could consumer protections be balanced to enable further innovation in a future retail electricity market?  |
| <b>Kraken Response</b> | <p>We recognise the importance of evaluating whether existing consumer protection frameworks need adjustments or enhancements. We support the Commission’s approach to balancing the need for enhanced consumer protections with the drive for innovation.</p> <p>There is a need for the Commission to consider how new energy offerings intersect with other industries and services. Specifically the financial services sector. A common feature of new energy offerings is to provide financing with certain CER. These arrangements remove a key financial barrier for certain consumers to be able to access new energy services. However, the intertwining of energy and financial products does present risk for consumers. The most significant risk is how consumers seek a remedy where they may be dissatisfied with their financed new energy arrangements.</p> |



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|  | <p>In circumstances where a customer may be dissatisfied with the service related to their financed CER product there is a complex process determining whether the dispute relates to a financial or energy matter. For instance, if a customer enters a financing agreement based on promises of savings on their electricity costs, but those savings are not realised, the customer is required to navigate through a complex system to determine the most appropriate forum with relevant jurisdiction to handle the complaint. The NSW Ombudsman has even highlighted one such example of this event occurring and the need for the customer to have their dispute resolved by both the Ombudsman and the Australian Financial Complaints Authority (AFCA).<sup>2</sup> While this example appears to be at the satisfaction of the customer, it is a less than ideal consumer experience for a customer to be shuttled between external dispute resolution schemes for what is ostensibly an electricity product.</p> <p>We encourage the Commission as part of this review to consider these issues when determining the suitability of the current consumer protection framework.</p> |
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| <b>Question 7</b>      | <p><i>What barriers will need to be addressed to deliver future consumers a meaningful and beneficial range of products, services, and pricing structures?</i></p> <p><i>How might we consider addressing those barriers?</i></p> <ul style="list-style-type: none"><li>• <i>Consider the changes that are happening in the system now - what barriers might either endure or emerge post 2035?</i></li></ul>  |
| <b>Kraken Response</b> | <p>Despite the uptake of BTM DER in Australia, barriers still exist preventing consumers from realising the full potential of these assets. Notwithstanding those already identified through our response to the consultation questions, we note:</p> <ul style="list-style-type: none"><li>• <b>Technological barriers:</b> The lack of a uniform interoperability standard in Australia is a significant barrier to customers being able to unlock flexibility across multiple asset types and brands. A uniform interoperability standard will provide customers with greater confidence that their future energy resources are able to participate</li></ul> |

<sup>2</sup> Energy & Water Ombudsman NSW, 'Dispute resolution in the evolving energy market' (May 2022), Available [here](#).





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|  | <p>in innovative products or services (if they so choose). Kraken has recently established an international consortium of energy stakeholders to develop a single interoperability standard for CER (Project Mercury). This is a necessary step in our DER journey as it will provide international uniformity when it comes to connecting, communicating and controlling with CER.</p> <ul style="list-style-type: none"> <li>• <b>Tariff and pricing structures:</b> We need to ensure that the consumer experience is not adversely impacted by a lack of innovation in tariff reform. As we have raised in our response, we need to be more innovative in our network tariff structures to ensure that all parties (networks included) are able to realise the full benefit of consumer flexibility. We know innovative tariffs and dynamic price signals are also necessary to realise the full benefits of the significant investment into smart meter technologies.</li> <li>• <b>Governance:</b> We need to improve efforts to ensure consumer protection frameworks appropriately correspond with changing energy services. Appropriate consideration should be given to circumstances where a customer may finance the installation of CER devices either independently or under a subscription style model. Moreover, access to information to enable appropriate comparison of energy products/services should also be considered to ensure that consumers are able to easily compare different offerings.</li> </ul> |
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| <b>Question 8</b>      | <p><i>What should network tariffs look like in the future?</i></p> <ul style="list-style-type: none"> <li>• <i>What are the key choices and trade-offs we should consider when answering this question?</i></li> </ul>   |
| <b>Kraken Response</b> | <p>We are of the view that consumers should be incentivised to provide flexibility. Undoubtedly, this will require network tariff reform. This review will provide a strong opportunity to consider exactly how stakeholders can benefit from more dynamic and flexible tariff arrangements.</p> <p>We now have the technology and capability to deliver dynamic network tariffs, enabling retailers to offer dynamic pricing. These “dynamic tariffs” unlock significant economic benefits by allowing consumers, networks, and retailers to fully capitalise on consumer flexibility.</p> <p>We agree with the Commission that while efficient tariffs (such as dynamic tariffs) may be complex and unpredictable, there is an opportunity for</p> |





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|  | <p>retailers to address this concern through product innovation. An example of this is <a href="#">Octopus Energy UK's smart tariff arrangements</a> that organise complex tariff structures into simple, easy-to-understand energy products. Octopus Energy UK's customers are able to tailor their energy experience to a corresponding smart tariff that aligns with their low carbon technology.</p> <p>Dynamic tariffs offer significant benefits to distribution networks by helping reduce overall grid costs. A recent report by Netbeheer Nederland, the association of Dutch energy networks, highlighted how dynamic tariffs can lower the need for grid investments, support the energy transition, and ease grid congestion. By moving away from flat network tariffs, costs are distributed more equitably, with the highest charges assigned to users who place the greatest strain on the grid. This creates a clear incentive for those users to take steps, such as optimising their home energy systems, to reduce their costs. The report also emphasised the importance of managing the implementation of dynamic tariffs carefully to avoid making energy bills overly complex for consumers. We note other studies globally have identified similar benefits with these structures. We encourage the Commission to explore the role of dynamic tariffs in the NEM and as means for unlocking consumer and network value.</p> |
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| <b>Question 9</b>      | <i>How should the role of energy supply businesses evolve to meet customer and energy system needs in the future?</i>   |
| <b>Kraken Response</b> | <p>The role of energy supply business should be driven and shaped by the goal of delivering the best possible consumer experience.</p> <p>We recognise that in our shift to a decentralised electricity grid there are legitimate reasons as to why a network and a retailer need to control consumer flexibility. In our experience working in deregulated markets, distribution networks need visibility as to how consumer assets are behaving on their networks and retailers want to utilise this flexibility to reward consumers. For the most part we see the interest of both the network and retailer aligning harmoniously, to the advantage of the consumer. However, there will be instances where action needs to be taken causing a misalignment in outcomes between the network and retailer. Though these rare instances can be appropriately managed. The DSO model as</p> |



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|  | referenced in the consultation paper is one example of where networks and retailers can operate together to deliver value for consumers. |
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| <b>Question 10</b>     | <i>What changes might be required in the future to the interfaces between different energy supply businesses?</i>   |
| <b>Kraken Response</b> | We expect that in transitioning to a DER enabled electricity grid there will be a range of different models that will seek to support consumers with new energy services. While a range of operating models have already been considered or even implemented in some markets, we encourage the Commission to not be constrained to a single operating model but rather consider all approaches that provide the most rewarding consumer experience. |

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| <b>Question 11</b>     | <i>Do you have any feedback on our proposed assessment criteria?</i> |
| <b>Kraken Response</b> | We have no objections with the proposed assessment criteria.         |