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Mark Feather
General Manager, Policy and Performance
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Vector Limited
101 Carlton Gore Rd
PO BOX 99882
Auckland 1149
New Zealand
+64 9 978 7788 / vector.co.nz

Dear Mark

Submission on the AER's Position Paper on DMO 3

Introduction

1. This is Vector Limited's (Vector)¹ submission on the Australian Energy Regulator's (AER) Position Paper on Default Market Offer Prices for 2021-22 (DMO 3), dated 20 October 2020.
2. Vector acknowledges the AER's response to suggestions from several stakeholders, including Vector, during the DMO 2 determination process that the DMO price should be adjusted to reflect higher metering costs incurred by retailers for advanced meters (section 4.3 of the Position Paper). We consider this issue to become increasingly relevant as more and more consumers in DMO areas switch to advanced meters.
3. This submission broadly responds to questions 18-21 in the Position Paper, which relate to advanced metering issues. We discuss how advanced metering can support the DMO objectives and ongoing reforms in Australia's National Electricity Market (NEM), and the barriers to the accelerated rollout of advanced meters that can stifle the achievement of these objectives. We make suggestions on how these barriers can be addressed as part of the DMO 3 determination process and related AER processes.

Responses to selected consultation questions

Q18: Do you agree our DMO 2 approach to advanced meter costs remains appropriate for DMO 3?

Q19: If not, what is the evidence that advanced metering costs are impacting retailers' abilities to recover their costs to serve standing offer customers?

Q20: Is it reasonable to increase the DMO price for flat rate standing offer customers to take account of the higher costs of advanced metering?

Q21: Do you agree our DMO 2 approach to costs to supply solar customers remains reasonable?

¹ Vector's Australian and New Zealand advanced metering business – Vector Metering – is an accredited Metering Provider and Metering Data Provider, and a registered Metering Coordinator, in Australia's National Electricity Market and the equivalent in New Zealand. Vector Metering provides a cost-effective end-to-end suite of energy metering and control services to energy retailers, distributors and consumers.

Vector is one of New Zealand's largest listed companies and provides energy and technology services across the country, with a vision of *creating a new energy future*. We are the largest provider of electricity and gas distribution network services in New Zealand, and the country's leading provider of advanced metering solutions. We also provide fibre network services, solar PV, energy storage, home energy management solutions, and electric vehicle recharging services.

4. The Power of Choice reforms introduced competition in metering services in the NEM and envisaged the timely transition of consumers to advanced metering through widespread retailer-led rollouts. While intended to be driven by retailers, the adoption of advanced meters benefits all industry participants, and importantly, consumers.
5. We set out below the critical role of advanced meters in: 1) promoting market competition, innovation and consumer engagement, 2) helping facilitate recovery from COVID-19, and 3) implementing reforms in the NEM that benefit consumers. It is this critical role that makes it important for the rollout of advanced meters not to be delayed or stifled, and factored into the determination of DMO 3, so that consumer benefits can be delivered in a timely manner.

Advanced metering supports the DMO objective of “not disincentivising competition, innovation and investment by retailers, and retaining incentives for consumers to engage in the market”

6. Advanced metering is required to enable consumers to make clear choices about how and when they use electricity, and take actions such as implementing energy efficiency strategies, shifting demand from peak periods, changing consumption patterns, and generating their own electricity. This provides consumers with the ability and incentives to engage more actively in energy markets, take greater control of their energy use and consumption (e.g. how often they are billed), and make informed choices on who they share their data with (e.g. through the Consumption Data Right [CDR] for the energy sector).
7. The ability of retailers to remotely read their customers’ consumption in near real time, enabled by advanced meters, reduces their operational costs and improves the accuracy of their bills for customers. Importantly, advanced meters provide the opportunity for retailers to offer innovative pricing and provide the customer with the choices described above.
8. In our view, the benefits of advanced meters are best delivered through a competitive market, as envisaged by the Power of Choice reforms. The current competitive market has seen the decline of upfront metering costs to consumers and downward pressure on ongoing metering costs. We believe that incentives for continuous innovation are stronger under a competitive market where metering service providers focus more on delivering new and improved services to existing and potential customers than on regulators.

Advanced metering helps facilitate recovery from COVID-19 which the AER is also trying to address through DMO 3

9. Advanced metering enables resilience from the impacts of COVID-19, which the AER is taking into account in its DMO 3 determination. The use of more accurate and real-time data from advanced meters allows service providers to better target their support measures to energy customers in hardship due to COVID-19, ensuring energy affordability and the timely delivery of support for these customers.
10. In addition, the ability of consumers to switch from quarterly to monthly or more frequent billing and payment, enabled by advanced meters, helps those in hardship better manage their power bills and finances.
11. Advanced metering allows the delivery of ‘contactless services’ (i.e. remote meter reads and remote disconnections and reconnections), protecting the health and safety of metering service providers, their customers, and the public
12. From a network perspective, advanced metering data provides distribution network service providers (DNSPs) greater visibility of their network, enabling them to respond to outages or potential outages in a timely manner. This helps ensure that ‘the lights are kept on’ and the delivery of essential services is not disrupted during the crisis and recovery period.

13. Using advanced metering data, DNSPs can manage their network more efficiently, for example, through demand response programmes. More efficient network management further enhances a network's capacity to host increasing numbers of renewable distributed energy generation, avoiding costly new network investment or expansion and contributing to long-term emissions reduction.

Advanced metering supports the post-2025 market design and other ongoing reforms in the NEM

14. Advanced meters underpin broader policy objectives, including the Energy Security Board's (ESB) post-2025 market design initiatives. Advanced metering facilitates the move to two-sided markets, for example, through more sophisticated demand response programmes. It enables the efficient integration of distributed energy resources (DER) to the grid, for example, using on-demand solar generation data that supports decision making around dispatch to virtual power plants, optimising the value of DER to its producers and consumers.
15. Advanced meters are already enabling ongoing reforms in the NEM, such as the shift from 30-minute to 5-minute settlement in the wholesale electricity market, which is intended to incentivise the entry of rapid response generation (e.g. solar PV and batteries). This would be ineffective without a rapid increase in the penetration of advanced meters.
16. Furthermore, advanced meters have a critical role to play in the implementation of the energy CDR, scheduled to commence in 2021. The CDR would make it easier for consumers to share or authorise the sharing of their data with third parties that they trust. These parties could then use the (more relevant) data for the development of new and innovative services (e.g. TOU pricing, price comparison services, etc), providing greater choice and control to consumers.

However, advanced metering expectations are not being met

17. Three years into the introduction of the *Competition in Metering Rule*, we expected the reforms to deliver a wide range of benefits to retailers, DNSPs, consumers and new service providers to support future market arrangements. At this stage of market development, we anticipated to see new retail products such as TOU and other innovative pricing, power quality data being sought by DNSPs to enable them to more efficiently manage their network, and increasing demand for new services from parties such as DER aggregators. To date, we have seen activity in some of these areas but not much in others. We had expected that demand for new services enabled by advanced meters would increase faster than the level we are currently seeing.
18. Our advanced metering business (Vector Metering) had anticipated that, by now, over 500,000 meters per annum would be installed across the competitive metering regions in the NEM. Rather than this anticipated number, competitive Metering Coordinators are currently installing closer to 300,000 advanced meters per annum across the market.
19. We expected volumes of 3% to 5% of the legacy metering fleet to be refreshed annually based on a 20 to 30-year asset life. This would represent approximately 200,000 meters per annum or 600,000 meters since the commencement of competitive metering in December 2017. Instead, we believe less than one-third of this number has been released by DNSPs for replacement. Based on this replacement rate, the legacy metering fleet will not be completely replaced with advanced meters until 2060 – way beyond the proposed commencement of any post-2025 market design arrangements.
20. While metering service providers face natural incentives to deliver new services to their customers and consequently consumers, the take-up of these services is adversely impacted by the slower-than-expected deployment of advanced meters and a relatively low advanced meter population. The population of advanced meters must reach a critical mass before the

market can reasonably expect these new services to be developed and delivered to consumers. For this reason, any barriers that impact the volume of advanced meters deserve immediate attention.

Retailers are facing disincentives to accelerate the deployment of advanced meters

21. The inability of retailers to make a case for large-scale retailer-led deployments is another issue impacting the rollout of advanced meters. The transition to advanced metering cannot be accelerated through meter replacements on a piecemeal basis.
22. The Power of Choice reforms envisaged retailer-led deployment of advanced meters, however, Vector Metering has seen almost no retailer-led “new meter deployments” (as defined in the *National Energy Retail Rules*). While we had not forecast any volumes in this category, the fact that there have almost been none is an indication that retailers are unable to build a business case to support deployment. Current market conditions have developed in such a way that retailers alone carry the cost of deployment even though the benefits from advanced meters are ‘split’ across multiple parties such as DNSPs, third party data access seekers, etc. For example, recent DER regulation in South Australia mandates the installation of more expensive metering, the costs of which are borne by retailers for whom there is no apparent benefit.
23. In our view, the reluctance by retailers to invest in large-scale advanced metering deployment is driven by the cost differential between legacy metering and advanced metering. Under current market conditions, the advanced meter is materially more expensive than the avoided cost of the legacy meter being replaced. A key factor driving this is the removal of upfront fees for a meter installation that the customer was previously required to pay. In many cases, these fees were significant and outrightly recovered the costs of the metering asset. These costs are no longer charged directly to the customer and are now recovered by the retailer over a longer period via annual metering charges. This makes it difficult for retailers to make a business case for replacing legacy meters with advanced meters. As a result, retailers are only deploying advanced meters where the *National Electricity Rules* require them to do so, i.e. in the case of New Connections, Adds & Alts, and meter malfunctions.
24. Unrecoverable legacy metering charges and the low volume of advanced meters are driving the costs of advanced meters higher, making the business case for large-scale deployment (or further deployment) unattractive to retailers.

Recent regulatory changes are driving up the costs of advanced metering

25. While the Power of Choice reforms have delivered competition between metering service providers that is driving down the cost of metering services, the delivery of this benefit is being put at risk by recent regulatory changes driving up costs. Examples include mandated metering installation timeframes, requirements around shared fusing, and new obligations under South Australia’s Smarter Homes program.
26. In addition, earlier expectations of uniform and consistent advanced metering requirements across the NEM have not been met. Examples include inconsistent approaches around load control services across networks, inconsistent installation requirements by health and safety regulators, and recent changes to minimum advanced meter specifications in South Australia. These inconsistencies constrain metering service providers’ ability to reduce the price of advanced metering to consumers, and therefore their uptake.
27. Regulatory barriers have also adversely impacted the ongoing deployment of basic advanced metering services. In New South Wales, the moratorium on the use of remote energisation services has only been recently removed (1 October 2020) and regulation in Queensland is still in place that effectively makes these services impractical.

Incentivising the accelerated rollout of advanced meters through the DMO is in the long-term interest of consumers

28. As an enabling technology, advanced meters deliver benefits that are split across various market participants. This needs to be recognised so that steps can be taken to allocate advanced metering costs efficiently and fairly, rather than the current situation where the costs are borne by a single group of participants (i.e. retailers).
29. Not accounting for any additional costs that retailers face for TOU/advanced meters in DMO 3 means that for every additional advanced meter deployed, the retailer's margin is effectively eroded, driving retailers to delay the rollout of advanced meters for as long as they can. This would, in turn, delay the delivery of consumer benefits and is likely to frustrate the achievement of ongoing and impending reforms in the NEM.
30. We therefore suggest that the AER:
 - a. reconsider its preliminary decision in the Position Paper on the treatment of advanced metering costs and account for these costs in its DMO 3 determination. The dynamic efficiency benefits from advanced meters – driven by incentives for continued investment and innovation – provide a compelling rationale for such an adjustment;
 - b. regardless of the above (a), continue to monitor the costs of advanced metering and analyse their impact on retailers' ability to supply customers;
 - c. propose changes to the *Competition and Consumer (Industry Code – Electricity Retail) Regulations 2019* (DMO Regulations) that would allow the AER to make a separate annual price or model for customers with advanced meters, including one-off fees or fees for a service provided upon request. We note that the *Competition in Metering Rule* mandates the installation of an advanced meter for new connections, customer-initiated upgrades, and 'family failures' regardless of whether a TOU tariff is applied. Not supporting cost recovery from TOU customers discourages the adoption of cost reflective TOU tariffs, a key aspect of demand management and ultimately, security of supply;
 - d. propose a separate DMO price for solar customers, who are no longer a trivial proportion of electricity consumers, with market penetration rates exceeding 20% in some areas;
 - e. engage with the Australian Energy Market Commission during its review of the regulatory framework for metering services, scheduled to commence in December 2020, to pave the way for the development of options to address the barriers identified above; and
 - f. consider proposing a change in the DMO Regulations to introduce a glide path that would eliminate the DMO over time, or putting a sunset clause to the DMO, in the context of the continuing declining trend in retail prices across jurisdictions since the DMO's implementation.

Other measures are also needed to incentivise the accelerated rollout of advanced meters

31. In Vector's submission (dated 19 October 2020) on the ESB's *Post-2025 Market Design Consultation Paper*, we propose a set of measures and regulatory changes that are needed to address the above-identified barriers. While these are not directly related to the determination of the DMO, we believe these will help address the 'split incentives' problem and will benefit all industry participants and consumers, not just retailers and metering service providers. We reiterate these proposals below for the AER's information and consideration in its other work streams, where relevant and appropriate.

32. To address barriers to the accelerated rollout of advanced meters, Vector proposes the following broader measures for the consideration of energy regulators:
- a. rules/reforms that would deliver a higher volume of legacy meters for replacement with advanced meters, e.g. legacy metering assets to be replaced at a targeted minimum rate;
 - b. switching away from accuracy-based ‘family failure’ as the only large-scale mechanism to upgrade the legacy metering fleet to a more pro-active and strategic deployment of advanced meters, e.g. allowing DNSPs to determine that a legacy meter can be replaced by an advanced meter for reasons other than a malfunction;
 - c. rules/reforms that would improve the business case for retailers to continue to invest and accelerate retailer-led advanced metering deployments, e.g. removal of unrecoverable legacy metering charges;
 - d. rules that would mandate the upgrade of defective/unsafe metering installations. This issue relates to a Metering Coordinator’s or retailer’s lack of authority to require a customer to address defects and ‘non-compliances’ at the customer’s site that prevent a meter installation from proceeding. Current rules do not give the Metering Coordinator any mechanism to require the customer to resolve site-related issues. Vector Metering has a growing number of sites (in the thousands) with this issue;
 - e. exploration of innovative solutions such as a ‘network tariff discount’ for sites with advanced meters;
 - f. rules that would improve consistency in the implementation of the national competitive metering framework across jurisdictions, to reduce compliance costs and confusion; and
 - g. expanding the competitive metering market by ‘opening up’ metering markets in jurisdictions that do not have multiple/competitive metering service providers, e.g. the metering markets in Victoria and Western Australia.

Concluding comments

33. We are happy to provide further information to support this submission or discuss any aspects of it with the AER’s Policy and Performance team. Please contact Paul Greenwood (Industry Development Australia - Vector Metering) at Paul.Greenwood@vectorams.com.au or tel: 0404 046 613.
34. No part of this submission is confidential, and we are happy for the AEMC to publish it in its entirety.

Yours sincerely



Mitch Webster
General Manager – Commercial and Service Development
Vector Metering