20 January 2020

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

Mr Arek Gulbenkoglu
A/General Manager, Distribution
Australian Energy Regulator
GPO Box 520
Melbourne, VIC, 3001

By email: AERinquiry@aer.gov.au

Dear Arek

Submission on the Assessment of DER Integration Expenditure

Introduction

1. This is Vector Limited's (Vector) submission on the Australian Energy Regulator's (AER) consultation paper, *Assessing DER integration expenditure*, dated November 2019.

2. 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*. It is the largest provider of electricity and gas distribution network services in New Zealand, and the country's leading provider of advanced (smart) metering solutions. It also provides fibre optic broadband communications network services, solar PV, energy storage, home energy management solutions, and electric vehicle recharging services.

3. Our advanced metering business (Vector Metering) provides a cost-effective end-to-end suite of energy metering and control services to energy retailers, distributors and consumers. Vector Metering is an accredited Metering Data Provider and Metering Provider, and a registered Metering Coordinator, in Australia's National Electricity Market (NEM). We are deploying advanced meters in the NEM and are working with other industry participants on new technology demand side initiatives.

4. We set out below our comments on the proposed guidance framework for distributed energy resource (DER) integration and suggestions around the assessment of options to facilitate greater DER integration.

5. Vector's contact person for this submission is:

   Paul Greenwood
   Industry Development Australia
   [redacted]

Proposed guidance paper for DER integration

6. Vector supports the AER's proposal to develop a guidance paper for distribution network service providers (DNSPs) on the factors DNSPs should take into consideration to demonstrate the prudency and efficiency of their proposed expenditures relating to greater DER penetration (the guidance paper).

7. We further support the integration of the proposed guidance paper into the existing AER guidelines and expenditure assessment processes, particularly as a supplement to the AER's existing Expenditure Forecast Assessment Guideline (EFA Guideline).

8. More broadly, we support greater DER integration – including enhancing low voltage networks' hosting capacity – that would enable the timely delivery of new and innovative services that benefit electricity consumers.

Assessment of options

9. Vector agrees that a DNSP's preferred option should be "that option which maximises the economic benefit to all those who produce, consume and transport electricity in the national electricity market" (page 5-12 of the consultation paper), and deliver efficiencies for the industry and consumers. DNSPs should therefore face incentives to efficiently manage DER connected to their low voltage network. This goes to the heart of the National Electricity Objective:

   …to promote **efficient investment** in, and **efficient operation and use** of, electricity services for the **long-term interests of consumers** of electricity with respect to:

   - price, quality, safety and reliability and security of supply of electricity
   - the reliability, safety and security of the national electricity system.

   [emphasis added]

10. Any preferred option should incentivise, and remove barriers to, greater DER integration with adequate oversight by the AER. This would enable the delivery of more new and innovative services in a timely manner without imposing onerous costs on consumers.

11. To facilitate the above outcome, we propose that the following criteria be included for assessing options as part of the development of the proposed guidance paper, in addition to existing criteria in the EFA Guideline and other relevant AER guidelines. DNSPs should be incentivised to choose an option that:

    a. *Unlocks innovation*

    In the electricity sector, we see tremendous opportunity for unlocking efficiencies and innovation where DNSPs are not fully utilising data already generated and held by Metering Data Providers.

    b. *Avoids the duplication of infrastructure or systems*

    We strongly support the AER's inclusion of 'non-network options' in the assessment of DNSPs' forecast DER expenditures.

    We agree with the AER's observation that "[t]here is opportunity for DNSPs to purchase information from metering or DER data providers rather than building their own assets and systems" (page 6-18). The unnecessary costs of duplicating infrastructure or building new information systems will ultimately be borne by consumers.

    The guidance paper should incentivise DNSPs to use data already available from existing metering investments, for example, from Metering Data Providers. Smart technologies, enabled by advanced metering data, can help make networks become 'asset light' and avoid costly new network investment or expansion.

    In our view, service providers with a track record of efficiently and effectively delivering new and innovative products and services, or enabling their delivery, in the energy or related sectors should be given preference.

c. *Facilitates optimal timing for the DNSP's initiative*

Technology solution providers that do not need to invest in new infrastructure or create costly new systems (e.g. accredited Metering Data Providers) are well placed to deliver the required service or the same outcome within a shorter period.

d. *Minimises, if not avoids, risks associated with stranded assets*

We agree that "the investment timeframe is key because a short investment recovery timeframe may be less risky than a long investment timeframe (e.g. 50 years or more) due to stranding risk uncertainty" (page 5-15).

e. *Is flexible and able to be adapted to changing consumer expectations*

The preferred option should be capable of being 'dialled up or down' to reflect consumer demand and expectations in the context of rapidly evolving technologies and markets.

f. *Ensures that consumers only pay for the services or features they use or require*

g. *Provides certainty not only to DNSPs but to all stakeholders, including potential service providers, on how distribution expenditure programmes will be assessed*

We agree that "…uncertainties present a risk to consumers if investments are made that may prove unnecessary" (page 5-15).

h. *Does not result in consumers being charged more than once for the same service*

i. *Does not compromise network safety, reliability and resilience*

This supports key aspects of the National Electricity Objective.

j. *Does not impede the entry of other service providers in, and potential entrants to, the market*

This can be ensured through regular reviews by the relevant DNSP and/or the AER of the preferred service provider's performance in the delivery of the solution.

k. *Is delivered by a service provider or providers selected through a transparent and contestable process*.

This would enable greater competition in, and incentivise entry to, the market for these services.

Concluding comments

12. Vector is happy to discuss any aspects of this submission with the AER. We look forward to providing feedback on the draft guidance paper, as necessary and appropriate.

Yours sincerely
For and on behalf of Vector Limited

[redacted]

Richard Sharp
Head of Pricing and Regulatory Compliance