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Australian Energy Market Commission
201 Elizabeth St
Sydney, NSW 2000

By email: aemc@aemc.gov.au



Vector Limited
101 Carlton Gore Road
PO Box 99882, Newmarket
Auckland 1149,
New Zealand
www.vector.co.nz
Corporate Telephone
+64-9-978 7788
Corporate Facsimile
+64-9-978 7799

Integration of energy storage – regulatory implications

1. This is Vector Limited's (**Vector**)¹ submission on the Australian Energy Market Commission's (**AEMC**) discussion paper "Integration of Energy Storage – Regulatory Implications", dated 9 October 2015 (**discussion paper**). Vector's contact person for this submission is:

Anna Casey
Principal Regulatory Advisor
Tel: +64 (9) 978 8138
Email: Anna.Casey@vector.co.nz

2. Vector is one of New Zealand's largest listed companies and provides energy and telecommunications services across the country. It is the largest distributor of electricity and gas in New Zealand and is the country's leading provider of advanced metering solutions as well as operating successful telecommunications and solar businesses.
3. Vector's vision is to create a new energy future. It has recently partnered with Tesla Energy to deliver Tesla energy battery storage solutions to Australasia. Vector is actively seeking commercial opportunities in both New Zealand's and Australia's emerging battery storage markets.

Vector case-study

4. There are some errors in the "Case study: Vector battery leasing product" in Box 2.2 of the discussion paper. The solar battery product described in the case study was a trial only, and operated within the existing regulatory framework as such. Vector has not "developed a methodology for quantifying the contribution of individual benefits to the total value of such leasing arrangements" and there have been no specific changes to New Zealand's regulatory framework to accommodate the rapidly developing energy storage market.
5. Vector is now assessing the outputs of the trial to inform not only the further development of its battery business but also its conversations with the

¹ For more information about Vector, go to www.vector.co.nz

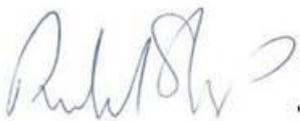
regulator about how the regulatory framework needs to evolve to incentivise investment in batteries and other emerging technology.

6. Just like Australia, New Zealand is only now turning its mind to the challenges and opportunities that energy storage will have on current regulatory structures and energy markets.

Regulating Energy storage

7. Vector believes that the discussion paper provides the industry with a good starting point for evolving its thinking about how, and the extent to which, energy storage solutions should be regulated. In particular, Vector welcomes the AEMC's observation that developments and innovations in energy storage are challenging traditional boundaries along the energy supply chain. Such innovation will provide opportunities and market structures that were not previously contemplated by the current regulatory framework.
8. At this early stage of its exploration in the Australian market, Vector is not in a position to give answers to the specific questions raised in the discussion paper. However, it believes any regulation for energy storage solutions, or indeed any emerging technology, should be founded on the following key principles:
 - a) Regulation should only be used to the extent necessary;
 - b) Any regulation should enhance (rather than diminish) incentives to invest and innovate; and
 - c) The regulatory framework should be flexible enough to evolve at the same rate as emerging technology.
9. Vector would be happy to engage directly with the AEMC about anything raised in this submission, particularly if further clarification is required about the solar battery trial described in the discussion paper. Please contact either Anna Casey (details above) or Andrew Fraser, Vector's Group Manager for Key Projects, on +64 (9) 978 8336 or Andrew.Fraser@vector.co.nz.

Yours sincerely,
For and On Behalf of Vector Limited



Richard Sharp
Head of Regulatory