

12 February 2021

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Regulation branch
Commerce Commission
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Dear Nick,

Review of Commerce Commission's Funding for the regulation of electricity and gas networks under Part 4

1. Aside from the short-term challenges posed by COVID19, the Net Zero climate challenge remains the foremost economic challenge for our time. The de-carbonisation of energy systems is a critical element for nation states to meet their commitments under the international accord established by the 2015 Paris Climate Agreement.
2. The technical innovation to support energy system de-carbonisation will also require a radical overhaul of the principles that have guided sector regulation to date. The extent of change required to meet the Net Zero challenge should not be under-estimated. It requires a clear strategy and recognition that enablement needs to come from several sources – including a future-focussed regulatory framework.
3. The ground-breaking work by Laura Sandys in her “box set” *ReCosting Energy*¹ publication illustrates the significant seismic shift needed in the sector. She characterises the current supply model as a centralised linear “generate, dispatch and deliver” commodity supply chain which will need to evolve to a future state of digitalised, locally produced, low carbon, interactive marketplace enabled by sophisticated networks.
4. Accordingly, the challenge for the Commerce Commission is not to remain idle or a spectator but to utilise its specialist skills to actively enable the shift required. This is especially given the central role energy networks have in the future supply model.
5. In this regard, overseas energy regulators are already recognising the need for them to transform their regulatory frameworks to align with the Net Zero goal. Ofgem Chief

¹ Laura Sandys CBE, Thomas Pownall, et al, *ReCosting Energy* “Box set”, available at challenging-ideas.com/publications

Executive Jonathan Brearley recently presented to Energy UK's annual conference on Ofgem's Net Zero strategy. He noted:

*"Ofgem itself is going to need to change and we are fully up for the conversation about what that might mean about our roles and our duties... We were designed in a world that was not moving the way the energy system is moving now so we want to become a more adaptable and responsive organisation."*²

6. Cyber security is a pertinent example of how the electricity system is changing. Ofgem identifies cyber structure as a key element of the power system and supply security should be considered in terms of both physical and digital risks. As the energy system transforms and digitalises, the threat of digital risk grows. This risk is also magnified by nefarious actors targeting critical social infrastructure for cyber-attacks. The recent concerted high-profile attacks on the NZX and Reserve Bank of New Zealand demonstrate New Zealand is not immune from the threat of cyber attacking. More pertinently, the very recent successful infiltration of the Florida city Oldsmar's water treatment system where hackers sought to release chemicals into the city's water-supply illustrate the potential widespread community harm cyber-attacks are able to cause to critical infrastructure such as water and electricity grids.
7. The future electricity system and direction of regulation is also being actively considered by Australia's regulators with the Australian Energy Market Operator and Australian Security Board.³ These entities have significant work programmes for determining the best way to manage the challenges of the new supply model including bi-directional electricity flows, two-sided markets and optimising distributed energy resources. In this respect, the Australian Energy Regulator's recent revenue control Draft Decisions for Victorian Distribution Network Service Providers included specific capital expenditure programmes for the five networks on integrating new distributed energy resources onto their networks.⁴
8. We see an urgent need for New Zealand's regulatory framework to modernise to support the sector transforming to meet the Net Zero challenge. Therefore, we endorse the

² Keynote speech Jonathon Brearley, *Ofgem's Vision for a Net Zero Future*, 16 October 2020

³ AEMO, NEM Distributed Energy Resources Program – post 2025 Market Design Process

⁴ Australian Energy Regulator, AER issues draft determinations for Victorian electricity distributors, 30 September 2020

Commission having greater resources at its disposal to developing a regulatory strategy to support the sector's transformation to meet the country's Net Zero goal. There is a pressing imperative for the Part 4 framework to develop the right incentives for networks to commence the investment journey for transformation especially in ultra-low interest rate environments.

9. We recommend the Commission increase its engagement with stakeholders and utilise the expertise stakeholders have with their own transformation journey to modernise and decarbonise their businesses. Effective engagement with industry through forums such as stakeholder workshops and expert forums will provide a greater transfer of knowledge and feedback on the challenging areas of the current framework. The use of stakeholder and industry knowledge will ensure the Commission's own adaptation for a regulatory framework supporting the future supply model is well-grounded and limits the burden on its own resourcing to navigate its regulatory transformation relying only on its own knowledge base.
10. Importantly, we recommend the Minister of Commerce and Consumer Affairs provides direction that any new resourcing for the Part 4 functions to be dedicated for the Commission investing in the skills and task of modernizing the regulatory framework to support New Zealand's energy sector's transformation to meet the Net Zero future.
11. To this end, Vector recommends the Commission endeavour to discharge its core business as usual functions within its current resourcing. For example, the foreshadowed Input Methodologies Review could be undertaken on a targeted basis to ensure the Commission's resources are effectively allocated for the process.
12. We see greater need for the Commission to harness new skills and capability to meet the Net Zero challenge. This should include an emphasis on developing an internal capability around climate change economics and transition.

Yours sincerely



Richard Sharp
GM Regulation and Pricing