

Submission in response to the Commerce Commission “Open letter — ensuring our energy and airports regulation is fit for purpose”- Pat Duignan

Summary

This is an independent personal submission reflecting my own views. I do not have an advisory relationship with any electricity industry participant and this submission is not concerned with airports.

The purpose of this submission is to highlight the connections between issues and to draw attention to challenges facing the New Zealand electricity industry regulatory framework. The issue the Commission needs to address is indeed whether the framework of energy regulation is fit for purpose. This submission focuses on the implications for the Commerce Commission’s work programme of the government’s ambition to achieve a very rapid decarbonisation of the New Zealand economy, involving electrification of the vehicle fleet and of industrial processes that currently utilise fossil fuels. That ambition is taken as a given in this submission.

In summary, I submit that the Commission definitively should take the opportunity of the Energy Input Methodologies review to answer the questions which the open letter suggests the review may involve considering, namely whether the Commission’s regulation under Part 4 achieves the following:

- supports the transition to a low carbon economy, but in a way that does not compromise consumers receiving the energy services they demand, across reliable and resilient networks
- encourages innovative approaches to delivering least-cost energy services
- continues to provide a level of regulatory certainty and predictability conducive to efficient investment
- recognises wider regulatory systems and competitive energy markets, and the role of our regulation within them.

The Regulatory Framework Issue

The regulatory framework for the New Zealand electricity industry differs from the framework in many OECD countries in being split between the Electricity Authority (EA) and the Commerce Commission (the Commission). I know from personal experience as a former Commissioner that the two organisations strive to achieve a well coordinated electricity industry regulatory outcome.

The split of responsibilities, with the EA regulating the competitive segments of the industry (generation and retailing) and the Commission regulating the “natural” monopoly segment (transmission and distribution) has proved workable to date. It helps that a structural separation, in form of a prohibition on distributors engaging in generation or retailing (except in limited circumstances), was a key policy decision.

Now, however, a massive expansion of the electricity industry’s role is a central requirement of climate change policy and the timetable for that expansion is being drastically compressed¹.

Crucially, a very rapid expansion of the electric car fleet is being set as a “must be achieved” goal. That would require a daunting increase in the capacity of the local distribution networks unless rooftop solar panel generation in combination with batteries (and time of day smart metering) can reduce the capacity requirement significantly.

While centralised and workplace charging stations will be important if the planned increase in electric vehicles is to be achieved, widespread residential charging is needed for an efficient solution.

Rooftop solar panel generation could in principle significantly reduce the average load on the local network but that will not reduce the peak network load when sunlight is absent unless batteries are available to store the rooftop solar panel generated energy. Storage is needed between the time electricity is generated from solar panels in the middle of the day and the time it is required when cars are being charged. That time will usually be after their owners return home at the end of their working day.

¹ Given time constraints I have had to omit references that ideally would be incorporated in this submission

While the detail of the above analysis can be debated the key point is that a complex combination of different technologies with different regulatory considerations is going to be involved.

Clearly, it will be very difficult for consumers and the electricity industry to put in place and operate the optimal combination of local distribution network capacity increase, rooftop solar panel generation and residential battery capacity².

Given the split between the EA and Commission, regulation relating to the role of residential batteries is particularly challenging, since utilisation of such batteries can be a substitute for network capacity which the Commission regulates on the one hand, and generation capacity which is the concern of the EA on the other.

Given the priority that decarbonisation now commands, Ministers and the community will expect the EA and the Commission to prioritise identifying and incentivising the optimal combination.

The Commission faces the difficulty that although Part 4 of the Commerce Act, enacted in 2008, includes a reference to energy efficiency the Act makes no reference to climate change nor to decarbonisation.

I suggest that the Commission needs to itself determine (taking account of its split responsibilities with the EA) whether the Parliament's imperatives regarding climate change and specifically decarbonisation are compatible with Part 4. Specifically, the issue that the Commission needs to assess is whether the IM Review, conducted in accordance with the provisions of Part 4, can address the issue of identifying what IM settings would help industry participants and consumers identify (as far as feasible) and implement the optimal combination of network capacity augmentation, rooftop solar panel generation and residential battery installation. This assessment needs to be made before the Commission commences the IM Review.

Understandably it may seem (at first consideration) that it is for MBIE and Ministers to assess whether Part 4 is compatible with the Climate Change Response (Zero Carbon) Amendment Act 2019. Closer consideration, however,

² The solution to the problem of old car batteries with reduced storage capacities may well be that they can be used as residential batteries where the reduced capacity per unit of weight and volume is not a concern. This would significantly reduced the cost of residential battery capacity and could make widespread residential battery installation economically feasible.

indicates that only the Commission is in a position to make this assessment prior to embarking upon the IM Review. The Commission is to be commended for listing in the open letter the questions that need to be addressed.

Assessing the answers to the questions may be difficult. In particular, the Commission will be concerned to avoid appearing to introduce into its IM review considerations beyond those in Part 4, or to prejudge the outcomes of the IM Review. The Commission will also wish to avoid appearing to promote changes to its own legislation.

The reality, however, is that neither MBIE nor Ministers can assess this key issue of compatibility between the current regulatory framework (including the split of responsibility between the EA and the Commission and specifically Part 4) on the one hand and the Climate Change Response (Zero Carbon) Act 2019 on the other unless the Commission has provided its assessment. That assessment should be informed by a consultation process. The Commission laid the groundwork for the assessment in its joint project with the EA, “Spotlight on emerging contestable services” and related work. Now that work needs to be driven to an assessment of the implications regarding the regulatory framework, specifically as regards the Electricity IMs.

The responses to the open letter will provide a starting point for a consultation on the listed questions. I suggest that the Commission move quickly to an in depth consultation on these questions rather than delaying full consideration of them until the start of the IM review in Q1 2022.

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