



18 September 2024

Electricity Authority

By email to: network.pricing@ea.govt.nz

Tēnā koutou,

Consultation on transmission pricing methodology amendments: a level playing field for emerging technologies

Thank you for the opportunity to provide feedback on the consultation paper on amending the transmission pricing methodology (TPM) to create a level playing field for emerging technologies. We'd like to thank the Authority for considering this issue, and developing a proposed solution quickly.

We fully support the way the Authority has defined and explained the problem. The paper explains a very complex issue clearly, and gets to the heart of the issue as we understand it.

Our concerns with the current approach largely relate to the challenges it creates for generators investing in Battery Energy Storage Systems (BESS). As highlighted at page 27, generators would be charged more than \$1 million more each year than other market participants for a BESS that consumed 10GWh per year. If unresolved this would severely limit the amount of flexible BESS that is installed in New Zealand, weakening the systems ability to respond to peak demand as gas supply declines.

We support the proposed solutions on the basis that they address the immediate challenges regarding investment in certain technologies such as BESS. However we recommend that the Authority undertake a second stage of this project to consider alternative methods of calculating the connection and residual charges. This is because while all methods may have some degree of distortion, it is not clear that the proposed approach would be the least distortionary of all options available.

We see two broad categories of problems with the connection and residual charges once these solutions are implemented:

1. The residual charge for energy consumption is open to manipulation, and the incentives to manipulate will often not be related to underlying system costs. For example, because generators have a low load factor, any reduction in energy consumed will have a disproportionate impact on our residual charges. This may impact on how certain plant are run, and incentives for off-grid electricity supply, which are likely inefficient to the system overall. It may also encourage complex financial structures to take advantage of the provisions for new customers.
2. The complexity of the residual charges dampens the incentive to reduce load in an efficient way. For example, two factories with the exact same energy needs will have different incentives to offer demand response depending on when the factory was built. There will also be a different incentive depending on where energy use is compared to the benchmarks. We expect that this will distort, and weaken incentives for efficient demand response, and energy efficiency.

We propose that the current approach to connection and residual charges is assessed against fundamentally different alternatives, such as a uniform charge for all existing and new load

users, or a method where load factors are regularly updated. While all methods may have some degree of distortion, it is not clear that the proposed approach would be the least distortionary of all options available.

Please contact me at brett.woods@contactenergy.co.nz if you wish to discuss further.

Ngā Mihi,

A handwritten signature in blue ink, appearing to read 'Brett Woods', with a stylized flourish at the end.

Brett Woods
Head of Regulatory and Government Relations
Contact Energy.