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Submissions
Transpower
WELLINGTON

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KING COUNTRY ENERGY SUBMISSION ON TPM DEVELOPMENT: EXPLORING A TRANSITIONAL CONGESTION CHARGE

Introduction

King Country Energy (**KCE**) is a renewable generator based in Taumarunui. We own five hydro power stations in the central North Island in the Waikato and Manawatu-Whanganui, generating on average 197GWh per year.

KCE welcomes the opportunity to provide feedback to Transpower on the development of a Transitional Congestion Charge (**TCC**), as enabled by the new Transmission Pricing Methodology (**TPM**) Guidelines published by the Electricity Authority (**the Authority**) on 10 June 2020 (**new TPM Guidelines**).

The new TPM Guidelines require a complete replacement of the existing TPM, including the removal of the Regional Coincident Peak Demand (**RCPD**) charge which was previously used to allocate interconnection costs.

In developing the new TPM, Transpower is required to consider whether inclusion of a TCC would better achieve the statutory objective. Under the new Guidelines a TCC is intended to be a very narrowly targeted charge which must start progressively being phased out as soon as it is introduced.[1]

The process that Transpower must follow in developing the new TPM has been outlined by the Authority, with “checkpoints” required along the way. The timeframes for development are highly ambitious.

The first checkpoint occurred on 1 October, with Transpower having been required to provide details of its initial analysis around the new TPM, including on key design considerations for the new benefit based charge (**BB charge**) and any TCC.

As part of its consideration of a TCC, Transpower held two online workshops for invited guests on the design of a TCC on 6 October. Transpower did not provide any details of its initial thoughts around a TCC, despite having already provided these to the Authority by 1 October.

[1] Refer to Guidelines 58-60

KCE was not directly invited to participate in the workshops but did share its views with both Peter Calderwood (Trustpower) and Mary Ann Mitchell (IEGA) in advance.

This submission provides KCE's views on matters discussed during the workshops (as reflected in the videos that have been made available), including the removal of the RCPD and need for a transition arrangement. It also captures our concerns around such a short consultation round on what is a very important consideration for the new TPM.

KCE supports the submissions of both the IEGA and Trustpower.

KCE's views

The importance of consultation

KCE considers the engagement process adopted by Transpower for considering a TCC has not been adequate on this occasion.

Holding workshops with limited participation and allowing only 2 weeks for cross submissions has not enabled meaningful engagement. This is particularly the case for KCE where key staff have been unavailable for one week of the cross-submission period due to other commitments.

While we appreciate Transpower's time constraints, in our view consultation needs to be of sufficient duration and signalled well in advance to enable participants to fully engage.

It is also exceptionally challenging to encompass all relevant considerations within what is deemed a cross submission when there has been no information around Transpower's more recent views in this area shared. That is, there is nothing to respond to directly.

The restricted consultation is of particular concern for KCE as the removal of the RCPD charge will have significant impacts on our business.

- There will be immediate impacts at an operational level from mid-next year as the incentives to operate distributed generation at times of transmission peaks will change. Distributed generation will be incentivised to operate plant to maximise revenue from nodal prices rather than maximising generation during periods of peak demand. This will potentially have implications for security and reliability of supply when peak energy prices and peak transmission prices do not coincide.
- The regulatory uncertainty created by these changes, along with the Authority's previous reforms to the distributed generator pricing principles, may also have longer term implications for investment decisions.
- For current maintenance practises distributed generation often defer maintenance in the likely event of an RCPD peak, usually by a few days. Relying on nodal pricing will mean that there will have to be a substantial difference between daily prices in order for distributed generation outages to be deferred for a high transmission demand peak.

The case for a transition

The discussion during the workshops focussed on the risks associated the immediate removal of the RCPD charge and the high-level design of a TCC charge.

The focussed discussion during workshop 2 on the risks associated with the abrupt removal of the RCPD captured many of KCE's concerns.

We also note there is a strong international precedent for the use of a peak demand measure for allocating the costs of the transmission network. Peak demand as an allocator is intuitive and easy to understand, its therefore not surprising that there is a long history of its usage in New Zealand.

The removal of the RCPD charge as an allocator under the new TPM Guidelines is a **substantial** change which was not widely supported during the Authority's consultation processes previously[2]. While some of the likely impacts are known, there are many unknowns which presents a very real risk of unacceptable price spikes or load shedding occurring. These outcomes are unlikely to be politically acceptable.

In such circumstance a prudent regulator would not remove the RCPD charge without a transition which enables the effects of a phase out to be studied and effectively managed.

The significant risks associated with removing the RCPD without a transition were reflected in the views of many workshop participants and include:

a) Limited knowledge around the likely effects of relying solely on BB charging and real time nodal prices to suppress peak demand on a region by region basis (i.e. loss of ripple control, changes to consumer/embedded generator operating behaviour). In addition, it is uncertain what the impact will be in terms of availability of ripple control to assist with managing transmission peaks. Its plausible that an additional ~1300MW of demand could be added to the system due to the removal of the RCPD[3].

b) Uncertainty around how quickly the industry will adopt new arrangements to mitigate the impact of real time nodal prices and BB charges. For example:

    i. distributed energy resources (including batteries, solar PV) are still emerging. It is unclear whether these will be available in the scale needed to mitigate the costs to transmission customers and end users associated with the new prices;

    ii. there is limited experience with demand response in the spot market (i.e. limited uptake of the Authority's dispatchable demand scheme[4]) and broader uncertainty around customers preferences to engage in the spot market. The low hanging fruit in this area has already been picked;

    iii. real time pricing will have only just been implemented 6 months before the new TPM takes effect. It is uncertain at this stage how the market will respond to this change;

    iv. BB charges are unproven and there is uncertainty around how a line of sight will be established between participants behaviour and the trigger for investment under these new charges; and

    v. the financial trading right market arrangements, which enable participants to manage their risks, do not include a peak product and are only available at eight nodes.

It is vital that Transpower takes the time to adequately consider the impacts of removing the RCPD on a region by region basis, given that the existing signal will no longer have an impact from 1 September 2021. This aligns with the recommendation by David Reeve (Independent expert from Sapere) during workshop 2 that consideration be given to the transmission planning impacts of removing the RCPD signal.

More broadly, KCE notes that incorporating a proper transition would align with best practice regulation, where great care is taken when making regulatory changes that substantially affect the basis

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[2] In fact only 4 submitters actually supported the removal of the RCPD during consultation on the new TPM Guidelines in 2019.

[3] Refer to Transpowers submission on the Authority's 2nd Issues Paper (Feb-17, pp-17-18) "*the consequences of an LRMC [peak signal] not being implemented as part of a new TPM would, in our view, be a material increase in risks and costs across the power system and prices for consumers…. participants currently combine to reduce peak demand on the grid by approximately one fifth (~1300MW). Even a relatively small change in response could have significant impacts on the level of reliability, system security and prices faced by consumers.*"

[4] Acknowledging that the new dispatch light category might encourage more participation once the real time pricing reforms are implemented.

of, and prospects for, existing investors cost recovery (as will be the case for participants who have made investors on the basis of the RCPD signal). As NERA (2014, pp. ii-iii)[5] noted:

> "*The adverse effects of regulatory risk mean that best-practice regulators generally seek to minimise the risk of unanticipated change through the inclusion of change management arrangements as part of a package of changes that are likely to have an adverse effect on the financial position of existing parties operating within and subject to a particular regulatory framework.*
>
> *The principal objective of such arrangements is to minimise the effect of unanticipated changes to existing stakeholders, without compromising the long-term efficiency benefits of the reforms. The inclusion of effective change management arrangements enhances the stability and predictability of the returns of investors, which in turn fosters an environment conducive to investment in long lived assets"*

A transition would also provide much needed insurance against the uncertainties outlined earlier.

Options for a transition

KCE does not consider that Transpower would comply with the Authority's statutory objective if it presents a TPM without a transitional peak charge. This is because a new TPM that does not enable a proper transition from having a permanent peak charge to the new arrangements to supress demand at peaks (i.e. BB charge and nodal charges) would not be consistent with the efficient operation of the industry, as was established above.

Our view is that the best option for ensuring a smooth transition to the new TPM is to modify the RCPD charge and progressively phase it out. This was strongly supported by the majority attendees at workshop 2.

If you have any queries around the material presented in this submission, please contact me directly on cfincham@kce.co.nz.

Kind Regards

Chris Fincham

General Manager

King Country Energy

[5] Available via: https://www.ea.govt.nz/assets/dms-assets/17/17074Trustpower-Limited-attachment-B.pdf