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Submissions
Electricity Authority
P O Box 10041
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By email: tpm@ea.govt.nz

Dear TPM team,

Re: CROSS SUBMISSION on Consultation Paper – Proposed Transmission Pricing Methodology

The IEGA welcomes the opportunity to make this cross submission on the Electricity Authority's Proposed Transmission Pricing Methodology (Proposed TPM).[1]

This submission highlights other submitters support for the issues raised in the IEGA's initial submission relating to the:

i. impact of removing a peak demand signal in transmission charges
ii. inequity of allocating charges to EDBs based on volumes of electricity that don't use the transmission grid
iii. complexity of the Proposed TPM making it impossible for current and future transmission customers to budget or forecast for future transmission charges and the impact of this on their investment decisions
iv. inconsistent treatment of batteries compared with other load customers

These themes are discussed below. We have not included extracts from others submissions but suggest the Authority should be focused on considering these concerns as it reviews all submissions as well as ways to address these concerns so that the TPM enables load and generation transmission customers to support and deliver New Zealand's goal of a low emissions economy.

On 9 December the Authority published its 'Energy transition roadmap – Supporting an efficient transition to a low-emissions energy system'. This is after initial submissions closed on the Proposed TPM. While the cross submission process is supposed to be focused on commenting on other submissions, the IEGA believes the Authority's *Energy transition roadmap* is now important context

[1] The Committee has signed off this submission on behalf of members.

for analysing the impacts of the Proposed TPM as the Authority applies an holistic view across the sector and its work programmes.

i. Impact of removing a peak demand signal in transmission charges

Numerous submitters (Orion, NZ Steel, Oji Fibre Solutions, Vector, Northpower and Top Energy, Hiringa Energy and Trustpower) are concerned about the impact of removing the peak demand signal from transmission charges. Submitters highlight that the Authority's reliance on the spot market to send the right signals is misplaced and that the required investment may not arrive at the right time.

The Authority writes "*As the proposed new TPM is likely to remove the peak pricing signal in transmission pricing, efficient distribution pricing becomes more urgent*"[2]. The IEGA queries why transmission pricing should not work alongside distribution pricing to manage peak demand.

We reiterate our view that "*It would seem prudent given the uncertainty of demand growth for decarbonisation to have something already in the 'toolkit' to ensure reliable supply and avoid constraints*".

ii. Inequity of allocating charges to EDBs based on something they don't use

Orion, Nova, Trustpower, Oji Fibre Solutions and NZ Steel also highlight that the Gross AMD method for allocating the Residual Charge results in allocating transmission costs based on electricity volumes that do not use transmission assets. The Authority expects "*More investment in DER, including in renewable generation, batteries and demand response, will support the shift to lower emissions by decreasing peak demand (or at least, constraining growth in peak demand)*"[3]. We submit the Proposed TPM provides EDBs, industrials and commercial-scale distributed generation with minimal to no incentives to operate to decrease peak demand.

We reiterate the IEGA's views on this:

> *"The IEGA has argued for and continues to believe that net load or actual use of the transmission grid is also the correct allocator for the Residual Charge. It is unclear how a different approach as proposed can be justified for the two transmission charges, especially as the Proposed TPM Residual Charge involves paying for transmission services that are not used. Further, the proposed approach for batteries is 'final consumption' which is the same as net load (or load minus generation) not total consumption as for Residual Charges to load customers."*

iii. Complexity of the Proposed TPM and inability to forecast future transmission charges

Submissions were made from across the range of transmission customers (Oji Fibre Solutions, Mercury, Contact, Trustpower, Counties, Orion and Vector) on the impact of the complexity of the Proposed TPM and their inability to be able to budget or forecast future transmission charges. This is already impacting their consideration of investments to increase reliance on electricity / reduce reliance on fossil fuels.

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[2] Paragraph 4.40 of the Authority's 'Energy transition roadmap – Supporting an efficient transition to a low-emissions energy system', 9 December 2021. Released since submissions closed on the Proposed TPM https://www.ea.govt.nz/assets/dms-assets/29/Authority-cover-paper-for-roadmap.pdf

[3] Ibid, paragraph 4.23

This flows on to concerns about the durability of the TPM and whether the Proposed TPM can or will realise the benefits assumed by the Authority in the TPM.

It would be interesting to list all the assumptions, models and rules that are involved in operationalising the Proposed TPM - to start with there are 7 methods to calculate a Benefit-based Charge each with their associated assumptions and modelling. This compares with the current methodology based on the cost of three groups of assets (HVDC, HVAC and Connection) and actual electricity volumes.

While the current methodology may not be perfect there are ways to improve the current methodology, or, as Orion submits, "t*ransition to the new TPM over a period of time, progressively deweighting the RCPD and HVDC charge and replacing it with the new charge components. With this approach the impact on individual customers is mitigated"*[4].

We reiterate IEGA's views on this:

> *"It is critical there is clarity about transmission charges before the TPM is effective. Investors are already investigating distributed generation that could exceed network demand. The imposition, after the event, of a fixed transmission charge could financially cripple distributed generation projects. This has consequences for NZ's efforts to increase renewable generation capacity and reduce emissions across the economy."*

iv. Inconsistent treatment of batteries compared with other load customers

The IEGA urges the Authority to undertake additional analysis on the treatment of batteries and to publish how batteries are to be treated under Benefit Based Charges. Fonterra, Vector, Trustpower and MEUG express concerns about the proposed inconsistent treatment of batteries compared with other load customers. The Authority is highly focused "*on increasing competition in flexibility markets on distribution networks"*[5] but is creating an environment where batteries are treated differently to other flexibility services on the transmission grid.

We would welcome the opportunity to discuss this submission with you.

Yours sincerely

Warren McNabb
Chair

[4] Page 3 of Orion's submission

[5] Paragraph 4.20 of the Authority's 'Energy transition roadmap – Supporting an efficient transition to a low-emissions energy system', 9 December 2021. Released since submissions closed on the Proposed TPM https://www.ea.govt.nz/assets/dms-assets/29/Authority-cover-paper-for-roadmap.pdf