

22 December 2021

Submissions
Electricity Authority
PO Box 10041
Wellington 6143

By email: TPM@ea.govt.nz

2021 PROPOSED TRANSMISSION PRICING METHODOLOGY

Thank you for the opportunity to submit a cross-submission on the Proposed Transmission Pricing Methodology (TPM) submissions.

We agree and support the Maitua Valley Milk submission dated 1 December 2021. As proposed in the Maitua Valley Milk submission, we strongly encourage the Electricity Authority to be clear that they expect local networks to reflect the lagged residual charge in the pass through of transmission charges to new customers.

With support from EECA's Government Investment Decarbonising Industry (GIDI) fund, Alliance has started the pre-engineering work and distribution connection agreement negotiation to enable replacement of an existing coal boiler with an electrode boiler to provide process heat.

This project is expected to reduce carbon emissions by 11,739 Tons CO₂e per year.

Even with support from GIDI funding the business case is very challenging and in part, relies on the proposed TPM reducing costs to access existing transmission capacity with transmission charges for new process heat load being passed through by our local network on an incremental basis.

Direction to electricity distribution businesses required

We are also concerned that the incentives provided under the TPM for getting off coal may be lost, and our project viability compromised, if our local lines companies simply average out transmission costs to new and existing customers, rather than passing through just the incremental transmission costs of new process heat load.

Please do not hesitate to contact me if you require any further information.

Yours sincerely

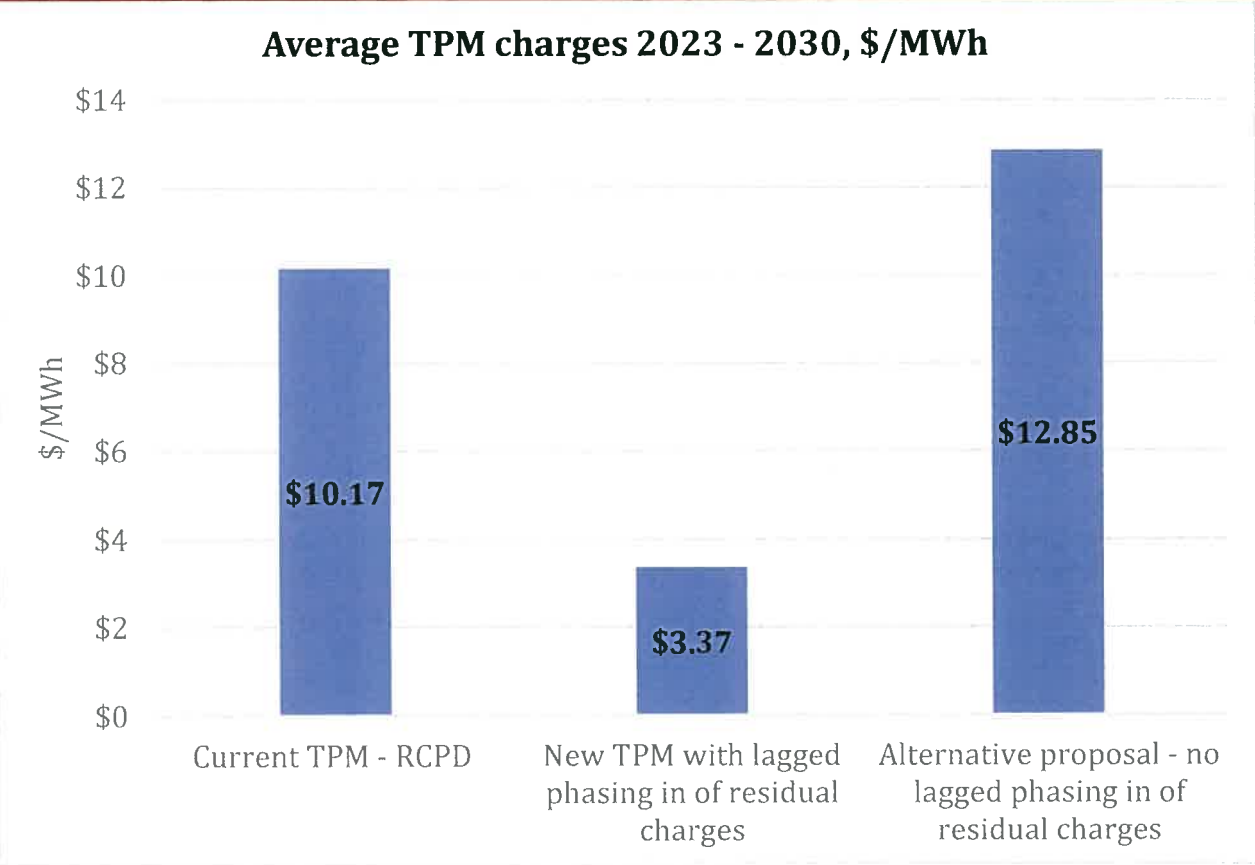


Doyle Richardson
GROUP ENVIRONMENTAL MANAGER

Alliance TPM Cross-submission

Alliance supports the Mataura Valley Milk recommendation and believe it will help deliver a TPM that better meets the Authority's Statutory objective.

TPM Proposal	Alliance Group	Recommendation
<p>Benefit based charge (Sections 13 – 30 of the Guidelines)</p>		
<p>Residual charge for a new entrant and expanding customer adjust with a lag and a gradual ramp-up</p>	<p>Strongly support</p>	<p>We strongly support the Authority's proposal that the residual charge for a new entrant customer ramps up gradually with a lag, such that a new entrant entering in year one begins to pay the residual charge in year 5 and pays a full-scale residual charge from year 8.</p> <p>We have made an investment decision to replace a process heat coal boiler with an electrode boiler plant. The following chart shows our modelling of the expected transmission charge (excluding connection charges) under the current TPM, the TPM with a lagged phasing in of residual charges, and Transpower's alternative proposal with no lagged phasing in of residual charges.</p>

TPM Proposal	Alliance Group	Recommendation								
		<p style="text-align: center;">Average TPM charges 2023 - 2030, \$/MWh</p>  <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Scenario</th> <th>Average TPM charges (\$/MWh)</th> </tr> </thead> <tbody> <tr> <td>Current TPM - RCPD</td> <td>\$10.17</td> </tr> <tr> <td>New TPM with lagged phasing in of residual charges</td> <td>\$3.37</td> </tr> <tr> <td>Alternative proposal - no lagged phasing in of residual charges</td> <td>\$12.85</td> </tr> </tbody> </table>	Scenario	Average TPM charges (\$/MWh)	Current TPM - RCPD	\$10.17	New TPM with lagged phasing in of residual charges	\$3.37	Alternative proposal - no lagged phasing in of residual charges	\$12.85
Scenario	Average TPM charges (\$/MWh)									
Current TPM - RCPD	\$10.17									
New TPM with lagged phasing in of residual charges	\$3.37									
Alternative proposal - no lagged phasing in of residual charges	\$12.85									

TPM Proposal	Alliance Group	Recommendation												
		<p>The modelling work has highlighted that transmission charges under the proposed TPM for new process heat load will be materially lower in the early years than Transpower's alternative approach.</p> <p>The following table shows the materiality of transmission costs relative to the fossil fuel alternative. The Authority's proposal would see the benefit-based and residual charges equivalent to 7% of the process heat costs from coal (with a carbon cost assumption of \$65/tCO₂). This increases to 26% under the Transpower's alternative.</p> <div data-bbox="584 719 1944 1098" style="border: 1px solid black; padding: 10px;"> <p>Transmission costs as a percentage of process heat costs of coal</p> <table border="1"> <thead> <tr> <th></th> <th style="text-align: center;">Lagged phase in of residual charge</th> <th style="text-align: center;">Transpower's alternative - no lagged phasing in of residual charge</th> </tr> </thead> <tbody> <tr> <td>Cost of process heat from Coal at \$65/Ton CO₂e in \$/MWh</td> <td style="text-align: right;">\$ 50.0</td> <td style="text-align: right;">\$ 50.0</td> </tr> <tr> <td>Transmission costs (\$/MWh)</td> <td style="text-align: right;">\$ 3.4</td> <td style="text-align: right;">\$ 12.9</td> </tr> <tr> <td>Transmission costs as a percentage of heat costs</td> <td style="text-align: right;">7%</td> <td style="text-align: right;">26%</td> </tr> </tbody> </table> </div> <p>Transmission costs at \$12.90/MWh will materially impact our project's economics which adversely impacts the potential of the project. As such, we strongly support lagged application of the residual charge to new load.</p>		Lagged phase in of residual charge	Transpower's alternative - no lagged phasing in of residual charge	Cost of process heat from Coal at \$65/Ton CO ₂ e in \$/MWh	\$ 50.0	\$ 50.0	Transmission costs (\$/MWh)	\$ 3.4	\$ 12.9	Transmission costs as a percentage of heat costs	7%	26%
	Lagged phase in of residual charge	Transpower's alternative - no lagged phasing in of residual charge												
Cost of process heat from Coal at \$65/Ton CO ₂ e in \$/MWh	\$ 50.0	\$ 50.0												
Transmission costs (\$/MWh)	\$ 3.4	\$ 12.9												
Transmission costs as a percentage of heat costs	7%	26%												

TPM Proposal	Alliance Group	Recommendation
		<p><i>Pass through of transmission costs by distributors risks undermining the Authority's intent</i></p> <p>A separate but related issue is how our local distribution company intends to pass through transmission charges to new process heat load. From our discussions it is not clear whether transmission charges to new load customers will be passed through on an incremental (i.e. the incremental transmission costs of new load to the network being passed through to the new load customer) or average basis (i.e. the average transmission costs across the network applied to the new load customer). We are concerned that our local network will pass through charges in a manner that is inconsistent with the proposed TPM. We strongly encourage the Electricity Authority to be clear that they expect local networks to reflect the lagged residual charge in the pass through of transmission charges to customers with new process heat load.</p>