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Submissions
Electricity Authority
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2019 Issues Paper —Transmission pricing review

The transmission pricing methodology (TPM) should support efficient investment and the use of one of New Zealand's competitive advantages; its low carbon electricity system. We believe an efficient TPM will facilitate the electrification of transport and industry and will help decarbonise our economy. This potential outcome, whilst not directly within the Authority's statutory objective should not be overlooked.

We have used the following principles to assess the proposed TPM:

- Durability and predictability;
- Incentivising non-avoidance;
- Cost reflection;
- Efficiency; and
- Simplicity.

We have been pragmatic when applying these principles given the challenging subject matter. Our submission sets out our priority recommendations including:

Assets contained in the benefit-based charge - We propose either all historical investments or none are included - an 'all or nothing' approach. Arbitrary boundary lines on what is included will likely lead to dispute. On balance our preference is for the benefit based charge to apply to future investments only, with the residual charge used to recover the costs of historical investment costs and the HVDC.

Zonal or regional approach – Calculate and allocate single benefits-based charges over broad zones or regions rather than by node as it is simpler and limits the risks of improperly allocating benefit-based charges to particular nodes through modelling error.

Exit of generation assets – A generator which shuts down one of its generation assets should not subsequently be liable for any ongoing transmission charges following closure of that asset.

We have reviewed the proposal in detail and are happy to discuss and provide further information on any of the matters raised in this submission.

Please don't hesitate to contact me.

Yours sincerely,

James Kilty
Chief Generation & Development Officer

Contact Energy, Transmission pricing methodology (TPM) response

Our recommendations below will help deliver a TPM that better meets the Authority's statutory objective.

TPM Proposal	Contact Energy	Recommendation
General Comments		
Transpower develops TPM to be approved by the Authority	Change	We highlight the principle of 'predictability' and the need to ensure a simple process and clear implementation timeframe for the TPM. We recommend an industry working group (including the Authority) be established to initially focus on core components of the TPM e.g. benefit-based charge, residual charge, and price cap. It is important that the potential divergence of approach between the Authority and Transpower (as recently seen in Transpower's interpretation of the Authority's ACOT test) is carefully managed. In addition, the TPM will need to be consistent with the distribution pricing principles.
Decarbonisation	Support	Electricity will play a key role in decarbonisation of the New Zealand economy. Economic regulation that governs transmission will be a key enabler of the transition to a low carbon economy. By incentivising demand growth during off-peak periods, where there is traditionally idle transmission capacity, will allow grid use to be maximised. Any such additional demand would mean fixed costs of the grid would be spread over a larger demand base, which would reduce the costs per unit.
Existing TPM		
Retain connection charge largely unchanged.	Support	This is consistent with a beneficiaries-pay approach and works well.
Remove the interconnection charge	Support	The existing RCPD is a poor signal of grid constraints resulting in inefficient use of the grid and strong incentives for avoidance. It minimises incentives to scrutinise new investment as costs are paid by everyone rather than being paid for by the beneficiaries of that investment. However a peak based allocation still has merit.
Remove the HVDC charge	Support	The HVDC has broader benefits for all customers rather than just for South Island generators and its role is no different from AC assets. As stated in the Authority's Executive Summary: at present, the HVDC is a 'tax' on South Island generation and distorts generation investment signals.

TPM Proposal	Contact Energy	Recommendation
Benefit based charge		**(Sections 12 – 38 of the Guidelines)**
Application of a benefit-based charge	Support	Contact supports the principle that those that benefit from a grid investment should pay it.
Assets contained in the benefit-based charge	Change	*Either include all historical investments or don't include any* Contact considers that an 'all or nothing' approach is required for existing historical assets. Drawing arbitrary boundary lines on which historical asses are included will potentially lead to ongoing dispute. An example of the potential for ongoing dispute is the proposal to exclude three significant historical investments originally included in the Authority's 2016/17 proposal. The approach taken to reach the decision to exclude these investments (a modelled assessment of beneficiaries post-investment) fundamentally differs from the approach proposed for future investments (an assessment of beneficiaries prior to the investment occurring that does not subsequently change). This highlights that ex-post and ex-ante assessments can differ materially. Also, a supplier operating in a competitive market would be unable to simply pass on the costs poor investment decisions to customers, but would be forced to write down the value of its assets. Another potential source of dispute is the inconsistent application of the date before which major grid investments are excluded from assessment of benefit-based charges. Historical investments post May 2004 are included on the basis that regulatory grid investment tests were not undertaken, however an exception is made for the HVDC. This could equally be applied to other pre May 2004 investments (i.e. those who benefit from the investment pay, promoting durability). We also note an investment threshold of $50 million is used for historical investments but $20 million is used for future investments. The $20 million threshold aligns with the definition of "base capex" used by the Commerce Commission. It would be helpful to clarify why the cost-benefit trade-off used to justify the $50 million threshold in paragraph B.66 should be different for historical compared to future investments. Finally, Contact notes that the Authority's cost-benefit analysis concluded that recovering costs of historical investments through the residual charge would deliver higher net benefits than through a benefit-based charge

TPM Proposal	Contact Energy	Recommendation
		(paragraph B.53). The absence of any international precedent for applying a benefit-based charge to historical investments is indicative of the challenges of undertaking this initiative. Taking account of these practical challenges, Contact recommends that the benefit based charge applies to future investments only (with no historical investments included) with the residual charge used to recover the costs of historical investment costs and the HVDC
Calculation of benefit-based charge	Change	*A zonal or regional approach is preferred rather than a nodal based allocation.* The current nodal allocation calculations are based on models that are highly sensitive to key input assumptions. This can lead to results that fail to accurately reflect beneficiaries. We propose that spreading out costs is preferable to inaccurately trying to pinpoint individual beneficiaries by node. Examples of how the model used can misrepresent the true beneficiaries include: • Generation with a non-zero marginal offer price is favoured over must run base-load generation, all other things being equal; and • The model is extremely sensitive to the pricing assumptions used – the average price from July 2018 to 31 March 2019 was more than twice that of the four-year average used in the model. Using a higher price assumption shifts the balance of benefit-based charges between generation and load customers. However, the Authority proposes to hard-wire benefit-based charge allocations on the basis of the four year period between July 2014 and June 2018 when price levels were lower. Contact's recommends a single benefit-based charge be applied across broad zones or regions for all investments. (i.e. not separate methods for high-value and low-value investments as proposed in sections 21 – 23 of the Guidelines). A single benefit based charge reduces the risks of: • applying false precision in the determination of beneficiaries; • inadvertently providing Transpower with the potential to structure its investments to use a preferred allocation approach (e.g. breaking a large investment into multiple smaller investments, or vice versa). *Gross load approach rather than net load* A 'gross load' approach, meaning a load customer's demand is "grossed up" by adding injection by distributed generation and/or behind the meter generation, would minimise opportunities for avoidance (as per ACOT issues)

TPM Proposal	Contact Energy	Recommendation
Calculation of benefit-based charge continued	Change	and maximise efficiency. The mechanisms to enable 'gross load' analysis need to be reviewed as the proposed reconciliation data (and associated rules) do not prevent inefficient investment in technologies such as solar PV. *Ex-post reviews aligned with Commerce Commission's Regulatory Control Period resets* Rather than a rigid ex-ante calculation and allocation of benefits (section 25 of the Guidelines), Contact recommends transmission charges be recalculated and reallocated at each regulatory control period. This would align processes and timeframes with the Commerce Commission's Part 4 regime and provide greater focus and transparency for all stakeholders. Contact considers there needs to be more flexibility for ex-post changes in use of the grid. The current flexibility to change benefit-based charges appears to largely limit ex-post changes that impact Transpower. This would be consistent with what would occur in a workably competitive market where it would be unusual for a user to pay charges on an investment that is delivering reduced or no services to them. *Exit of generation asset should not result in a continuation of benefit-based charges ascribed to that asset* In the event that a transmission customer, with a portfolio of generation assets, chooses to close one of its generation assets, then transmission charges should cease to be applied to that specific generation asset. Under the current proposal, a generator with multiple generation plants would continue paying transmission charges for the generation asset that was closed. *Treat revaluations as income* Treat benefit-based charge revaluations (section 15(a)(ii) of the Guidelines) as income (as the Commerce Commission does) to ensure there is no over recovery of the benefit-based charge. Using the residual charge as a balancing mechanism to ensure Transpower does not exceed its maximum allowable revenue is inefficient and undermines the beneficiaries pay principle. *Align depreciation method with those used by the Commerce Commission* A depreciated historic cost approach to align with the Commerce Commission's approach (instead of the indexed historic cost approach proposed in section 15(a)(ii) of the Guidelines) should be applied. This would avoid the residual charge being used as a balancing mechanism – with the residual charge rising in the early years of an investment and then reducing back down in later years.

TPM Proposal	Contact Energy	Recommendation
Calculation of benefit-based charge continued.	Change	Contact agrees with the Authority's assessment that varying the residual charge in this manner is inefficient (paragraph B.94). We consider that using the residual charge as a balancing mechanism undermines the objective of the benefits-based charge as there will be times when load customers who do not benefit from the investment are being (at least partially) charged for it. *Upgrading expenditure (sections 30 – 32 of the Guidelines)* We anticipate the Authority's proposal for post 2019 investments will lead to an over-recovery of the benefit-based charge. We propose that upgrading expenditure is treated as additional expenditure on the existing investment but include a provision to treat revaluations of benefit based charges as income. Under the Authority's proposal, Transpower will receive revenues in accordance with its independent price path using a depreciated historical cost approach, while it will only be able to allocate out charges using an indexed historic cost method. Depreciated historical cost recovers most of the cost of an investment in the early years of an asset's life, whereas indexed historical cost recovers more relatively later in its life. We recommend that depreciation methods be aligned with that applied by the Commerce Commission to avoid implementation difficulties. *No provision should guarantee Transpower can earn its Maximum Allowable Revenue (section 1(q) of the Guidelines)* A supplier of services in a workably competitive market is not guaranteed a set return on its investment. We query why Transpower is be able to use the residual charge to achieve its maximum allowable revenue in the event of a poor investment decision. *Reassignment provisions should be deleted (sections 33 – 38 of the Guidelines)* The ability to recover revenues from other customer classes if an investment fails is inconsistent with what would occur in a workably competitive market. Reassignment should not be provided for in the TPM. If an investment fails then the consequence should be carried by Transpower in the form of asset write downs, as would occur in a competitive market.
Residual charge		**(Sections 39 – 41 of the Guidelines)**
Residual charge to apply only to load	Support	The rationale for passing transmission costs directly to load is equitable. Applying these charges to generators risks causing distortions and inefficiency in the wholesale energy market.

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Calculation of the residual charge	Change	*A modified RCPD is preferred to gross AMD* A modified RCPD whereby the charge is applied to a greater number of peak periods (so as to avoid sending an overly strong price signal) and grossing up a load customer's demand by adding injection by distributed generation and/or behind the meter generation (so as to significantly reduce opportunities for avoidance), is a better reflection of the contribution of an individual user to grid congestion than an individual user's AMD or average load. We favour semi-regular reviews of residual charge allocations that would reflect demand changes in the market. These review periods could be aligned with the regulatory control periods applied by the Commerce Commission.
Prudent discount policy		**(Sections 46 – 48 of the Guidelines)**
Application of a prudent discount policy (PDP)	Change	Contact recommends refining the principles of the PDP by: 1. Changing the PDP default time period to be subject to agreement between Transpower and the transmission customer, rather than the life of the asset; 2. Requiring the direct consumer to pay the discount back if there is an improvement in its financial position for whatever reason (e.g. an increase in the relevant commodity prices); and 3. Shifting the management of non-transmission aspects of the PDP to a party other than Transpower.
Price cap		**(Sections 49 – 53 of the Guidelines)**
Principle of limiting price shocks to load customers	Support	Contact agrees with the proposal of limiting price shocks from a change to the TPM (sections 49 – 50 of the Guidelines). In principle, a price cap reduces the risk of an inefficient exit, for example a customer going out of business.
Application of price cap to load customers only	Support	We agree a price cap should be limited to load customers. This would alleviate concerns around certainty and price shocks with respect to the potential impact on residential and direct consumers.
Calculation of price cap	Change	*Price cap should be funded through delayed implementation, not a surcharge* We recommend the price cap should not be funded by a percentage surcharge on total benefit-based charges for pre-2019 investments and residual charges. The application of this principle would mean some customers will pay more under the price cap than they would under the Authority's proposal. Rather than a percentage surcharge, we propose

TPM Proposal	Contact Energy	Recommendation
		the price cap should be applied in the form of a staged transition where price increases and decreases across load customers are implemented over time. Also, under the proposal the price cap does not apply to generation and therefore it appears inequitable to require generators to co-fund a price cap. Likewise, requiring load customers who are not subject to the cap to fund the cap via a surcharge does not appear cost reflective. *Price cap should be in reference to the impact of transmission price changes, not total electricity bills* The price cap should be calculated with regard to transmission prices and not total electricity bills (excluding retail margins and metering). This would mean a consequential adjustment to the quantum of the cap (e.g. a 3.5% increase in an electricity bill is approximately equivalent to a 35% increase in transmission charges).