26 September 2019

Electricity Authority TPM changes will 'fleece' Kiwi consumers and the regions

Entrust does not support the Electricity Authority's planned changes to the transmission pricing methodology (TPM). We remain concerned the Authority's TPM plans would make electricity less affordable for consumers.

The Authority has not provided valid justification for substantial re-allocation of transmission costs, particularly the reductions for South Island generators, or evidence paying more for transmission services would be to the long-term benefit of consumers.

Under the latest version of the planned changes, South Island generators would save $48m each year in High Voltage Direct Current (HVDC) costs paid for by Kiwi consumers, and Tiwai Aluminium Smelter (NZAS) would pay $12m less. Aucklanders would end up paying $11m each year in HVDC charges to cover the cost of transporting electricity generated by Meridian and other South Island generators to the North Island. The Authority's proposed "price cap", instead of moderating the price increases, would raise prices in Auckland by an extra $4m, and also increase prices for consumers in most other regions.

It is of little comfort that the Authority has indicated the increases for Aucklanders would be less than the $78m increase it proposed three years ago. The Authority's pricing numbers are highly sensitive to the method and assumptions it applies, and have jumped round so much over the last seven years, it is difficult to know what the final result would be. The absolute size of the price increases is also masked by the assumed impact of the Commerce Commission's 2020 price determination for Transpower

The Electricity Review Panel looked at the issues the Authority raised with the TPM and asked "whether it is generators or residential and business consumers in poorer regions, such as Northland and King Country, that should benefit from lower charges under the Electricity Authority's proposed transmission pricing methodology"? The question should be rhetorical, but the Authority's answer is a 29% increase for Top Energy customers in Northland and 50% for King Country. We reiterate "Transferring significant value to corporate dividends is a highly unusual action for a regulator (particularly one which has a statutory duty to act for the long-term benefit of consumers)".[1]

Summary of Entrust's views

- **Entrust does not support any of the Electricity Authority's TPM plans:** We do not support adoption of the Authority's "benefit-based" charges, application of the benefit-based charges to historic investments, removal of peak-usage charges[2] or any move away from South Island generators paying the full cost of the HVDC link.

- **Corporate welfare doesn't benefit Kiwi consumers:** The Authority's plan to make consumers pay for part of the cost of the HVDC link would make consumers

[1] Entrust, Submission to Electricity Authority: Second Issues Paper – Transmission Pricing: issues and proposals, 22 July 2016.

[2] We are open to reform of the current RCPD charges to make them better targeted.

worse off by $48m per annum. This would provide windfall gains to South Island generators, particularly Meridian whose shareholders would benefit by $36m per annum. NZAS would also receive a windfall gain of $12m per annum, largely paid for by other consumers and the regions. It is bad enough that the retail petrol inquiry found consumers were being 'fleeced' at the pump, without throwing transmission pricing into the mix as well.

- **A bigger CBA number doesn't make it better than the last two CBAs:** The Authority is now into its third Cost Benefit Analysis (CBA) for the TPM review. It appears that the latest CBA contains a lot of errors and repeats mistakes from the earlier CBAs. The CBA results aren't useful for determining whether the Authority's planned TPM changes should be adopted, as they don't require introduction of benefit-based charges or their application to any historic investments. The results would essentially be the same if the Authority proposed a simple fixed-charge based TPM, which retained South Island generators paying for HVDC.

- **The changes would bring forward unnecessary investment in traditional network capacity and result in higher carbon emissions:** Entrust is concerned the Authority expects removal of peak-usage charges would bring forward unnecessary network and generation investment. This would drive up electricity costs and is counter to the Government's policy of promoting electrification of the economy and reducing carbon emissions. It is also the opposite of what the Authority is advocating for distribution pricing.

- **The changes would be bad for new technology such as solar and battery storage:** Solar and battery storage have a useful role in helping reduce peak-usage and the need for investment in network capacity. The Authority proposals would inhibit new technologies from competing against traditional supply chains and remove any reward for helping reduce future transmission investment needs.

- **Entrust is concerned about the impact on the regions:** The Authority's plans would result in substantial price shocks for many of the regions. Top Energy in Northland faces the prospect of an increase of 29% in the first year, and the Buller and Westpower on the West Coast face increases between 98 and 101%, respectively.

- **The allocation of historic investments is biased against consumers:** It does not appear the Authority has dealt with the substantive concerns about its proposed vectorised Scheduling, Pricing and Dispatch (vSPD) method for determining who benefits from historic investments. Vector, for example, detailed some of the ways "the proposed SPD method overstates consumer surpluses and understate producer surpluses".[3] At the Auckland TPM Workshop the Authority revealed its vSPD methodology could not identify any benefits from the North Auckland and Northland (NAaN) upgrade which brings into question the efficacy of the method.

The Authority's TPM plans benefit a few corporates, instead of consumers

The Authority's plans would see 88% of Transpower's costs loaded onto consumers and only 12% allocated to generators. This compares to the split of 85.5% for consumers and 14.5% for generators without the changes. The split was 81% to consumers and 19% to generators when the Authority last consulted on the TPM. This reduction for generators is despite generators clearly also benefiting from the grid in allowing them to transport their goods to market. There are no reasonable grounds for tilting even further the bulk of transmission charges onto consumers.

[3] Vector, Submission to the Electricity Authority on Transmission Pricing Methodology: Issues and proposals, 1 March 2013.

The Authority's TPM plans would hurt the regions

We are also concerned with the size of the price shocks for the regions with Top Energy in Northland facing an increase of 29% in the first year, and Buller and Westpower on the West Coast facing increases between 98 and 101%, respectively. After the price cap has been phased out Buller and Westpower would end up with prices that are 149% and 110% higher than current transmission charges.

Despite the benefit of proximity to large hydro generation plant Network Waitaki faces an increase of 55%, while NZAS benefits from a 20% overall reduction in transmission charges or 33% reduction in interconnection alone. The erratic nature of the Authority's planned pricing changes is highlighted by the prospect of Marlborough Lines benefiting from a 15% reduction, while its neighbours Nelson Electricity and Network Tasman would face price shocks of 26% and 31%, respectively. Horizon Energy in Whakatane would have the dubious privilege of being the lines company facing the largest initial increase in transmission prices of 107%.

It should be noted the large size of these increases in millions of dollars terms are artificially suppressed by network price reductions expected under the Commerce Commission's 2020 price resets. The Authority is also planning on, in effect, 'banking' the expected network price reductions under the application of the price cap i.e. the price cap limits price increases based on higher pre-2020 prices rather than the lower actual prices consumers would be paying after the 2020 price reset. This allows substantially higher transmission price increases before the price cap takes affect.

South Island generators should continue to pay all HVDC costs

Entrust does not support the planned change to the allocation of HVDC charges. Charging consumers for HVDC would result in a $48m per annum windfall gain for South Island generators. Aucklanders would pay an extra $11m per annum for just this one aspect of the Authority's proposals.

Negative wealth transfers		**Windfall gains to SI generators**	
Upper NI Load	$13m	Contact	$8.7m
Lower NI Load	$15.6m	Genesis	$2.4m
SI Load	$10.7m	Meridian	$36m
Major Users	$8.7m	Trustpower	$1m
Total transfer	$48m		$48.2m

We agree with Dr Brent Layton's (NZIER)[4] previous view that South Island generators are the sole beneficiary of the HVDC, and North and South Islanders don't benefit.[5]

[4] Brent Layton, NZIER, Report to MEUG, Notes on Submissions on Electricity Commission's Transmission Papers, 22 November 2004. Brent Layton, NZIER, Report to MEUG, Alternative Options for Transmission Pricing: Suggestions for the Review by the CEO's Forum, 8 October 2009.

[5] Dr Brent Layton (NZIER) has detailed why South Island generators are the only clear beneficiaries of the HVDC. We agree with Layton's analysis, including:

- "The HVDC assets are distinct from the rest of the grid and … the principal beneficiaries of the assets … are South Island generators".
- "disconnection of the [HVDC] grid would not materially raise the prices faced by load in the North Island; consumers in the North Island are not material beneficiaries to the HVDC in an economic sense."
- "… without the prior draw down of South Island lakes to send power north, there would be little likelihood of a need to import North Island power … without the HVDC, prices for electricity would be significantly cheaper on average for a considerable period into the future …"

Entrust considers the Authority's estimate that consumers receive 48.5% of the benefits of the HVDC link, and South Island load receives 18% of the benefit highlights the fundamental flaws in the Authority's proposal, and with the concept of estimating private benefits for individual transmission customers. What the Authority is saying is that on a per capita basis South Island consumers benefit more from the HVDC than North Islanders. The Authority plan for South Island consumers to pay over $18m for HVDC is liable to renew calls from Southerners to 'cut the cable'.

We agree with Dr Layton (NZIER, Report to MEUG) that "South Island generators … pay the charge at present, and any removal of the charge from them would amount to a windfall gain to their shareholders and windfall losses to end consumers" and that creating "substantial windfall gains to South Island generators at the expense of windfall losses to others" would be "unfair".[6] We also agree with Dr Layton that any "supposed disincentive" could be resolved "without creating … dynamic inefficiencies and wealth transfer issues" by only charging "existing South Island generation plant".

The Authority confirmed at its Whangarei workshop that it had not undertaken any cost analysis to substantiate its inefficient "tax" claim.[7] It isn't sufficient to rely on unsubstantiated claims that the current HVDC charges are a "tax", or that Meridian hasn't invested in the South Island due to the charges.

The Authority's CBA is fundamentally flawed and cannot be relied on

The Authority has now undertaken three CBAs as part of the TPM review. Based on advice Entrust has received none of the CBAs are robust or suitable to rely on to determine whether the Authority's TPM plans would benefit consumers or should be introduced.

None of the three CBAs the Authority has used as part of the TPM review are CBAs of the Authority's actual TPM plans.

The first Sapare CBA simply made assumptions about the size of the efficiency gains that could be made if the Commerce Commission made better transmission investment approval decisions i.e. it assumed the benefits and did not estimate them. Despite this resulting in the first CBA being replaced, the latest CBA repeats the same type of analysis.[8]

Various submissions pointed out the second CBA, undertaken by Oakley Greenwood, also didn't model the Authority's actual proposal. The latest CBA makes a similar mistake and is simply a CBA of replacement of the current Regional Coincident Peak Demand (RCPD) peak-usage charges with a generic TPM based on fixed or unavoidable charges and largely doesn't depend on introduction of benefit-based charges or change in HVDC

- "without the HVDC link sending power generated by South Island water northwards most of the time the South Island's storage would be adequate to cover the needs of South Island consumers".

[6] Brent Layton, NZIER, Report to MEUG, Proposed Guidelines for Transpower's Pricing Methodology: Comments on the Electricity Commission's Proposals, 4 November 2004.

[7] Layton (NZIER) highlighted the limitations of the tax disincentive argument which he described as "weak". Layton, for example, noted "the argument only has validity if the HVDC charge makes the difference between a South Island investment being viable or not. For intra-marginal investments this argument does not hold, and most hydro generation proposals in the South Island will be of this kind".

[8] The Authority has assumed a 4% reduction in costs for proposed E&D base capex investment that the Commerce Commission does not review, 2% reduction in proposed E&D base capex that are reviewed by the Commission, and 2% reduction for R&R capex.

allocation.[9] Our previous comment on the Oakley Greenwood CBA applies to the latest CBA: "their results would have been exactly the same regardless of whether sunk transmission assets are included in the new [benefit-based] charge or not … the upshot of this is that the CBA does not support applying [benefit-based charges] to existing investments such as the HVDC, NIGU and NAaN".[10]

Overall, Entrust doesn't consider the latest CBA is helpful in determining whether the TPM should be replaced, or about individual design components such as whether the allocation of HVDC charges to South Island generators should be changed, or whether benefit-based charges should be applied to any historic investments.

The TPM review process has been non-transparent

Despite the Authority taking over 2 ½ years to issue the latest TPM consultation, it does not appear to have taken into account in any meaningful or substantive way, submissions and expert advise it has received during the TPM review. We reiterate our support for the assessment and review of expert opinions prepared by Covec on behalf of the TPM Group.[11]

An example of the way the Authority has handled submissions is the HVDC topic. This is a highly contentious issue with major wealth transfer implications. Despite this, the consultation paper section "Arguments relating to removing the HVDC charge" only includes a response to one minor argument. The Authority has ignored the extensive submissions on this matter, including submissions as far back as the Transmission Pricing Advisory Group (TPAG) consultation in 2010, and the 1st Issues Paper in 2012.

Only responding to a single submission point on a substantive and contentious issue such as the HVDC reflects poor regulatory practice and suggests the Authority isn't listening to views it doesn't like.

We have previously pointed out the Authority did not notify stakeholders about its trip to the United States to investigate application of forms of beneficiaries-pay until well after the trip took place. We note also, by way of example, that the Authority delayed release of some of the CBA material which made more it difficult for expert consultants to fully review the CBA.

Process for development of the TPM needs to prioritise consumer engagement

Entrust does not support the Authority's proposal to limit consultation and consumer engagement through the TPM development process or limiting the TPM development phase to 12 to 18 months.

We consider lessons can be learnt from the mistakes the Authority has made during the TPM review, including not consulting or engaging with stakeholders at crucial stages of the policy development process.

Entrust expects regulatory good practice to be followed through the entire TPM development process including early engagement with stakeholders, and consultation at each stage of the process. The TPM development process should be undertaken with a time-frame which enables full and genuine consultation, including multiple consultations,

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[9] Virtually all the benefits are from removing RCPD, with negligible benefits from application of the benefit-based charges.

[10] Entrust, Comments regarding the answers provided by Oakley Greenwood in the Q&A session on CBA calculations, 4 April 2017.

[11] Covec, Expert Review of Expert Reviews of Transmission Pricing Methodology Reform Proposals, 23 February 2017.

cross-submissions, workshops etc as appropriate, and accommodates additional ad hoc consultations where the need may arise.

What the Authority proposes as "checkpoints", at which Transpower formally engages with the Authority, would be more appropriate as requirements for Transpower's engagement with customers and stakeholders.

Concluding remarks

Entrust considers the best way forward would be to either cease the TPM review, at least until the results of the Electricity Price Review have come out,[12] or look at moderate reform options that would not involve large wealth transfers and price shocks.

We reiterate "Entrust does not support a proposal that results in such an unfair redistribution of transmission costs from those least able to afford it to major corporate consumers and generators, particularly when the EA has shown no sound basis for doing so. While the Authority believes its changes will be more durable, such changes will simply transfer grievances to consumers, and, as such are unlikely to be durable".[13]

We are also concerned about the broader negative implications the changes would have for the Government's policy of promoting electrification of the economy and reducing carbon emissions, and implications for uptake of new technology such as solar and battery storage. We disagree with the Authority that discouraging investment in battery storage is a benefit of its proposals.

The time the Authority has spent on TPM has been a lost opportunity for the sector.

It could have been better spent prioritising competition problems in the retail and wholesale electricity markets. For example, resolving the two-tier market/saves and winbacks issue could make consumers, particularly vulnerable and low-income consumers, better off by up to $500 million per annum. This would dwarf any possible TPM reform benefits.

For further information, contact:
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Kind Regards

William Cairns
Chairman

[12] The Authority has put on hold decisions on saves and winbacks pending the outcome of the Electricity Price Review and appears to have done the same with other matters such as hedge market development.
[13] Entrust, Submission to the Electricity Authority re Transmission Pricing Methodology: Second Issues Paper – Supplementary Consultation, 24 February 2017.