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Transmission Pricing Methodologies: 2019 Issues Paper – Cross Submission

Thank you for the opportunity to provide a Cross Submission on the Electricity Authority (EA) consultation paper titled “2019 Issues Paper Transmission Pricing Review”.

This cross submission is from Eastland Generation Ltd and Eastland Network Ltd which are both subsidiaries of the Eastland Group Limited (Eastland).

Summary of Cross Submission

1. Length of TPM Review Time

Eastland is cognisant of the length of time and the significant resources that the EA and the electricity industry has put into the review of the Transmission Pricing over the last decade.

It is therefore disappointing that, considering that passage of time and resources used answering and responding to a large number of papers, the EA’s 2019 Issues Paper on Transmission Pricing review has changed little from the 2016 2nd Issues paper, it appears to have taken on little of the industry feedback provided and outlines a Cost Benefit Analysis (CBA) that appears to have significantly more detractors than supporters.

The length of time this process has taken creates uncertainty for industry and therefore impediments to investment. This process must be drawn to a conclusion soon or the process stopped to allow Transpower to start an operational review.

2. Cost Benefit Analysis

The CBA is the one element that the industry must be able to understand and have confidence that it demonstrates benefits large enough to support the change proposed by the EA. The EA needs to get the CBA correct after errors were identified in the 2016 CBA, leading to it being rejected by the EA.

Reading the submissions from regulatory and electricity industry experts, Eastland is left with a strong feeling of unease with the modelling and results provided by the CBA.

3. No LRMC Charge

While there are issues with the present RCPD charge regarding the strength of the pricing signal and tactics used to shift cost between parties, not including a LRMC price signal of any type appears to be a fundamentally flawed approach.

Eastland does not think that the shadow price from the Benefit Charge for the next grid investment provides this signal. Nor does it believe that most of the industry would be able to accurately calculate what their Benefit Charge would be for a new transmission investment if the Benefit Charge shadow price was meant to be used in this way.

A LRMC charge is a simple and appropriate way for a participant to trade off their use of the grid at peak time today against the likely cost of new transmission in the future.

Nodal pricing can only provide the SRMC of the present grids use and as such, while being very useful to drive allocative efficiency in the use of the present grid, does not and cannot be expected to provide price signals equal to the LRMC of the next grid investment.

Detail of Cross Submission

This Cross Submission will cover:

1. Is Change needed, and if so at what level
2. Lack of a LRMC charge and reliance on spot prices
3. Recovering sunk cost investments via the Benefit Charge
4. The Residual Charge
5. The CBA
6. Proposal by Vector and ENA to change the residual charge to apply to generation output

1. Is Change needed, and if so at what level

Transpower and others have consistently questioned whether wholesale change vs an operational review is necessary.

Eastland support Transpower's submission in this regard i.e. that an operational review to reduce the strength of the RCPD price signal to resemble the LRMC of transmission and make changes to the HVDC charge to broaden its collection to the sending islands generators would address the two major issues with the TPM that the EA has raised.

Change at a time when the industry must address a significant amount of uncertainty about what its future business models will look like, must be:

1. clearly articulated as to the reasons for the change,
2. how that change will impact on future business and investment decisions, and
3. be support by a robust CBA.

We are concerned about the unintended consequences that could flow from the EA's radical changes and how they be could be detrimental to:

1. Grid Investment,
2. Generation investment and
3. Meeting NZ carbon reduction efforts.

Unfortunately, Eastland is of the view that the EA has not provided the level of probative evidence required for it to support the changes as proposed.

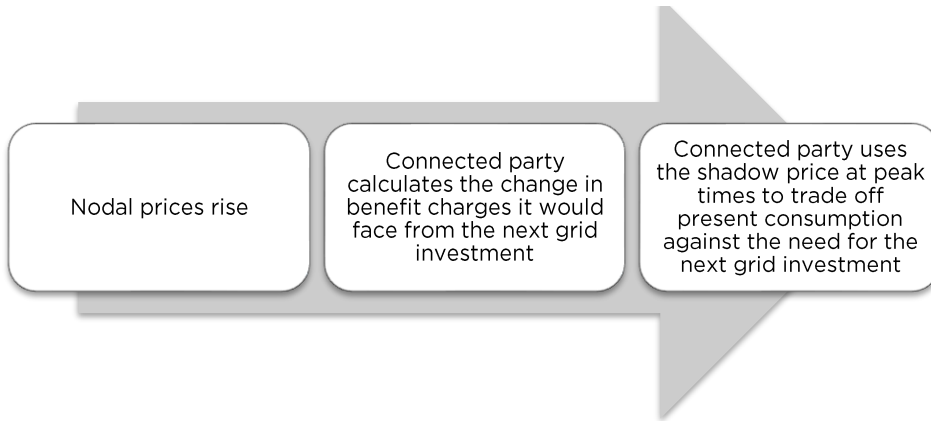


2. Lack of a LRMC Charge and Reliance on Spot Prices

Transpower and a significant number of other submitters felt that it was critically important that some sort of peak LRMC charge was used to send an appropriate signal about the future costs of new transmission to connected parties to allow them to balance their present consumption decisions against the likely cost of future grid investment.

In Eastland's view, this really is the missing piece of the EA's proposal.

In the EA's view, the beneficiary charge can be used as a shadow price for a LRMC price signal.



Unfortunately, while this may be reasonable in theory, most electricity users are not capable of doing this, considering the complexities of the calculation and the EA approach of using private benefits.

If your consumption decision did trigger a new grid investment, it would be spread over several parties based on how their private benefit accrue from the grid upgrade.

On the other hand, an explicit LRMC charge, as proposed by Transpower, is simple to understand and provides clear forward-looking price signal by which a party can trade off present consumption decisions against the future cost of transmission investment.



Eastland is of the view that the RCPD works and has driven a reduction in grid use at peak times. It is the strength of that price signal and the uneconomic investment it can drive, that is the EA's real issue.

Increasing the number of trading periods that the RCPD price is applied to until the price signal is reflective of the next grid investment in that RCPD area is an option available to the EA. If avoidance is still considered an issue, then the use of the average over several years of RCPD trading periods will make it harder to avoid.



Nodal prices do change in reaction to grid use; as the volume of electricity flowing over the line increases so do the losses. This drives a higher price at the receiving end of the line than the sending end.

This change in nodal prices signal the SRMC cost of the present grid only at the receiving node. This SRMC price signal is therefore very useful to help optimise the use of the grid capacity today i.e. they allow the asset to be sweated harder until new capacity is brought forward.

Nodal prices do not have any component in the calculation of the price that is reflective of the LRMC of the next grid investment and therefore, they do not and cannot provide any long run signal of the next grid investment.

3. Recovering Sunk Cost Investments via the Benefit Charge

Transpower, Trustpower, The TPM Group, Electricity Network Association and their associated exports all argue that there cannot be any change in economic efficiency by allocating sunk costs via a beneficiary charge. The decision on the investment has been made and the assets built.

Allocating charges ex-post to a group of customers who have no ability to change that decision is bad regulatory practice and does not improve either allocative or dynamic efficiency in Eastland view.

This charge has no international comparator. i.e. nobody in any transmission pricing regime is recovering sunk cost in this way.

The allure of beneficiary pays sounds attractive, and Eastland can understand the EA desire to apply it. The irony of the situation is if the EA had dealt with the TPM when it first started the process some of those assets would have been built and charged under the new TPM.

Some of the submitter's experts felt that it was useful for new investments, it was only where a clearly defined wide section of the grid could be identified as the beneficiaries of the investment.

These submitters promote, and Eastland supports, using the Commerce Commission's GIT (Grid Investment Test) as the mechanism for determining who the beneficiaries (generators or load or generation and load) are and the percentage of the cost that would be applied in the benefit charge.

This approach would align the charge to those parties that would receive benefit with the process for approving the investment, ultimately increasing investment scrutiny.

4. The Residual Charge

Eastland understands the EA's desire to allocate the remainder of Transpower's allowable revenue in a tax like unavoidable manner.

Eastland has two issues with the EA's approach:

1. The EA is promoting gross AMD as the allocator. This is reflective of the total amount of electricity purchased at a GXP while net AMD is reflective of the amount of electricity transported over the grid.

As the cost that is to be allocated is for the use of the grid, then the amount transported by the grid should be the allocator. Eastland supports Blue Scope Steel and Norse Skog submission on this issue.

2. The share size of the residual is too large. As discussed above, in the section on LRMC price signals, Eastland view is that the introduction of a LRMC charge is an essential part of any TPM and would help reduce the size of the residual charge.



5. The CBA

Eastland is very disappointed that the EA modelling and CBA has once again been characterised as faulty, error prone, using poor economic theory and in the words of Transpower's expert "it has no probative use".

The industry must have a strong belief in the CBA to support any change in Transmission Pricing. The lack of a robust CBA that is supported by submitters will only delay any final decision on Guidelines to Transpower for a new TPM and must bring into doubt the arguments in support of the proposal.

6. Proposal by Vector to change the residual charge to apply to generation

Vector and the Electricity Network Association both proposed that the Residual Charge be applied equally to generation and load since both use the grid.

Eastland does not support this change as the consequence would be that generators simply pass the charge through in their offer prices.

While carbon is recovered in this way it only has an impact when the marginal generator is a thermal generator and then only in proportion to the amount that thermal generator released carbon in each MWh produced.

An OCGT peaker (0.52ton/MWh) has a different carbon footprint to a Rankine unit on coal (0.99ton/MWh), therefore if a peaker is the marginal plant the nodal price will hold circa \$12 for carbon, while if the Rankine unit is marginal then you pay an extra \$25. Should a hydro plant be marginal then there is no extra nodal price at all. This outcome increases nodal price some of the time.

In passing the residual charge to generators all players that are at the margin will be passing their charge on, which just results in higher nodal prices all the time and causes a wealth transfer from consumers to generator. It is Eastland's view that it is better to charge the load only and not distort the spot market by attempting to apply the residual charge to generation.

Yours sincerely



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