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Submissions

Electricity Authority

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Consultation on Preliminary Decision on UTS Claim 10 Nov 2019 - Cross Submission

Thank you for the opportunity to cross submit on this important topic.

No part of this submission is confidential and I am happy for all of it to be published.

The EA is to be congratulated on a good process in seeking both submissions and cross submissions to allow the benefit of wider industry knowledge and information to be considered in its final decision. In this cross submission I would like to pick up and add to a point raised in both my original submission and several other submissions. In particular the EA's objections to generators using their offer strategy to manage transmission constraints so as to avoid price separation and high prices at the receiving end.

High Unintended Costs for Consumers if UTS By-passes Rule Making Process

I am concerned that banning this process, via the UTS process as a de-facto rule making process, could have very high unintended consequences for consumers. My attached very rough initial analysis suggests these costs are likely to be several order of magnitude higher than the costs (incorrectly[1]) identified by the EA's UTS analysis.

Myself, Trustpower ("We consider that if the Authority wishes to introduce a prohibition on generator offers being used to manage transmission constraints ..."), Mercury ("The use of offers to manage such risks ...") and Meridian (Part D) all picked up on whether effectively banning this process, via the UTS decision, might have unintended costs for consumers. Meridian went further and questioned whether de facto rule making via the UTS process was poor regulatory practice, as it was not subject to the normal information discovery and cost benefit testing of the usual rule making process

[1] Other submitters explained the flaws in this approach so I won't expand on that here.

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(Sapere report for Meridian). Thus leading to a higher risk of unintended consequences for consumers.

This cross submission seeks to reinforce the views above, particularly on the risks of the UTS decision having unintended consequences for consumers. It does so by providing an initial very high level assessment of the magnitude of possible costs to consumers should the preliminary UTS decision stand in its current form. It suggests these costs could be several orders of magnitude higher than the costs the EA calculated for consumers arising from the Meridian's offer strategy in November and December 2019.

These unintended costs would arise particularly from constraining sending generator's ability to manage transmission constraints via their offers so as to avoid very high prices in the receiving end. I estimate these costs to be well over $4.5B. My very rough estimate is derived by looking at what additional costs North Island consumers might have been exposed to if the HVDC northward constraint had bound, and the resulting price separation had been less successfully managed by South Island generator offers. This is a backward looking estimate of what might have been, and likely to under estimate future costs. Future costs are likely to be much higher than this because of forthcoming changes in market structure including:

- Northward flows are more likely to be constrained for some time if Tiwai point is closed before new transmission is built; and
- The degree of market concentration in North Island gas is likely to increase if constraints remain on new gas exploration(thus leading to higher prices for back up gas generation).

Historical Costs if Not Managing HVDC Price Separation - $4.5B

In my previous submission I explained how Meridian, and other South Island generators, appear to have previously used their offer strategies to manage to avoid price separation between the islands so as to avoid being exposed to high North Island prices, particularly when North Island thermal generators had a high degree of market power in the NI. I identified 400 days when price separation had occurred with very high North Island prices resulting for at least part of each day identified.

As a first cut at estimating the likely magnitude of the unintended costs to consumers that might arise should the preliminary UTS decision remain as is I looked at what might have happened if South Island generators had been unsuccessful in managing price separation in the 400 days identified. That is if the NI-South Island price difference which occurred during the periods of price separation had applied for the whole of that day. This is obviously a very crude estimate as it doesn't look at other days when they were successful in avoiding price separation at all. And it is subject to the same limitations as the EA's own approach to developing a counterfactual for

the UTS claim situation. Others have already identified the flaws in this approach. My calculation continues these flaws but is useful for a 'like for like' comparison.

As per the calculation in the attached spreadsheet my estimate of this historical cost to North Island consumers over the last 10 years is $4.5B approximately.

The above estimate only looked at a subset of instances on one transmission constraint in one direction, and only over 10 years. It did not consider the many other instances where price separation, and constraint of market power in the receiving end, has been managed by sending generator offer strategies. Thus it is likely to be a significant under estimate of historically avoided costs to consumers.

Details of my calculation are attached as a separate spreadsheet titled "NI Costs if HVDC Constraints not Managed".

Future Costs to North Island Consumers Likely to be Much Higher

Future costs to North Island consumers, of any ban on generators using offers to manage transmission constraints and price separation are likely to be much higher than my rough estimate of avoided historic costs due to:

- Higher northward flows if Tiwai is closed; and
- Less competition in North Island gas if future gas exploration continues to be constrained.

The likely closure of Tiwai point aluminium smelter is likely to increase the instance of northward transmission constraints for at least until further transmission investment if completed.

The current ban on North Island gas exploration is likely to continue the current trend of increasing North Island gas prices, as per my previous submission. This is likely to increase the influence of gas on electricity prices, and North Island prices during constrained periods in particular, as gas provides the back up for intermittent renewable generation (hydro, wind and solar). Refer the EA's own work on drivers of wholesale prices (Market Performance Quarterly Review, Q2 - 2020, special topic 2) https://www.ea.govt.nz/monitoring/enquiries-reviews-and-investigations/2019-2020/market-performance-quarterly-review-july-2020/ . This is unlikely to be relieved by any new NI wind generation build due to the need to provide back-up via gas, refer https://www.mcc-berlin.net/uploads/media/Ueckerdt_Hirth_Luderer_Edenhofer_System_LCOE_2013.pdf.

Conclusion

This cross submission supports and provides additional evidence to the points raised in submissions by Trustpower, Mercury and Meridian regarding the dangers of constraining generators ability to manage transmission constraints by their offer strategy. It supports Meridian's point that any change in market rules is best done via the rule making process, not via a UTS decision process. Using the UTS decision process as a de-facto rule making process, without the benefits of market insights brought by the rule making process, is likely to result in significant costs to consumers. Costs likely to be several orders of magnitude higher than those identified (incorrectly) in the UTS review, as shown by my simplistic rough estimate of possible historical costs to North Island consumers if price separation over the HVDC constraint had not been managed by generator offers.

Regards

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