NEIL WALBRAN CONSULTING

Submissions

Electricity Authority

PO Box 10041

Wellington 6143

Consultation on Preliminary Decision on UTS Claim 10 Nov 2019

Thank you for the opportunity to 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 the excellent analysis to date on the UTS claim. It is a great summary of what happened and what might have happened if Meridian only had a different offer strategy. However, I would like to propose a wider framework for analysis, taking into account broader issues of depth of competition in certain (North Island reserves and thermal fuel supply) markets and therefore how other market participants might have changed their offers in response to any change in Meridian's offers.

This submission

Proposes a wider framework for the analysis, focussing on the assumed counterfactual including;

- How North Island generators may have changed offers if the HVDC constraint had bound, taking into account:
    - Past North Island generator offer behaviour in the presence of binding HVDC northward constraints;
    - The lack of depth in the North Island reserves market;
    - Possible lack of a depth in North Island gas market at present; and
    - Whether there are barriers to entry into these two markets at present.
- Whether such lack of depth in these markets may, at times, undermine the efficiency of the risk management tools the EA prefer Meridian to use (FTR and energy hedges);
- Whether Meridian's strategy, of managing HVDC constraints by its offers, may provide an important counter to the lack of competitive depth in the North Island reserves and gas markets.

10 Hataitai Rd, Wellington 6021
Mobile +64 21 626 851
www.NWCL.co.nz, Email: Neil.Walbran@NWCL.co.nz

Introduction - EA Analysis Good But Not Broad Enough

The EA are to be congratulated on an excellent analysis of the events for the periods in question and interpreting what did happen. This submission has nothing to add to that analysis and agrees with the EA that Meridian did appear to manage their offers so as to avoid the HVDC constraint binding and a price separation occurring.

However, I suggest the framework for analysis needs to be extended further to consider more what might have happened if the constraint had bound. In particular I question the assumption in 14.18 *"We note however a competitive response from North Island generators would more than likely lower prices, benefitting North Island consumers".* I suggest historical evidence, of past offer behaviour, and current North Island gas prices raise concerns about how reliable this assumption of strong competitive pressure might be.

Meridian's Role in Providing Competitive Pressure on North Island Reserves and Thermal Fuel Markets

I suggest that in the absence of such strong competitive pressure on reserves and fuel prices the counterfactual would be higher North Island electricity prices and an overall detriment to consumer.

Meridian is an integrated generator and retailer (gentailer) who competes in the North Island retail market. It manages its exposure to the constrained North Island thermal fuel market when the HVDC constraint binds northward by using its South Island offers. The HVDC constraint northward usually binds well before the thermal rating of the line due to reserve constraints. North Island reserves are frequently dominated by partially loaded North Island hydro generators and there is not a great depth in this market. Meridian will often respond to this by managing its South Island offers to avoid the HVDC constraint binding and price separation occurring, as you noted.

This provides some degree of competitive pressure to the North Island reserves and thermal fuel markets. This lack of competitive depth in these markets has persisted for some time due to barriers to entry to both markets. That is it would be very difficult to get resource consent for a large new North Island hydro scheme, or for developing a significant new North Island gas resource. These barriers to entry are likely to persist for some time.

Thus the risk management tools available to South Island generators, wanting to compete in North Island retail markets, may be less efficient than the EA seem to assume in the preliminary UTS decision.

Should the preliminary UTS decision become final in its current form it would risk reducing this competitive pressure. This would be to the long term detriment of North Island consumers, and to New Zealand consumers as a whole.

Background - Decision Assumes Perfect North Island Competition

Underlying the EA's analysis of the UTS claim is an assumed counterfactual that North Island prices would have been lower if Meridian had offered all its generation at a lower price and the HVDC northward constraint would have bound with consequential price separation (para 14.18). My submission questions this assumption based on historic behaviour (higher North Island prices when the HVDC constraint has bound northward) and recent trends in the North Island thermal fuel's market, which further constrain competition in North Island generation.

North Island Generation Competition

A key part of the EA's decision seems to be based on their objections to Meridian using its offer strategy to manage the HVDC flows to avoid a binding constraint and price separation. Past evidence suggests they do so to manage their exposure to high north island prices when the HVDC constraint northward does bind. This suggests there can be a lack of competitive pressure on North Island prices when the HVDC northward constraint binds. Their offer strategy is in response to these prices and provides additional competitive tension (on both spot prices and the available risk management tools). This competitive tension may be more necessary going forward as it appears the North Island thermal fuel market competition may be reducing, as evidenced by sharply increasing North Island gas prices in the last 3 years.

Evidence of Past High North Island Prices When HVDC Binds Northward

A very brief survey of prices across the HVDC from 2010 - early 2020 suggests there have been some instances of very high price separation when the North Island constraint binds. For example on 26-07-2016 and 13-12-2011, as per the charts below.

These are only random samples and there could have been more instances.

Over 400 Days of High North Island Prices When HVDC Binds in Last 10 Years

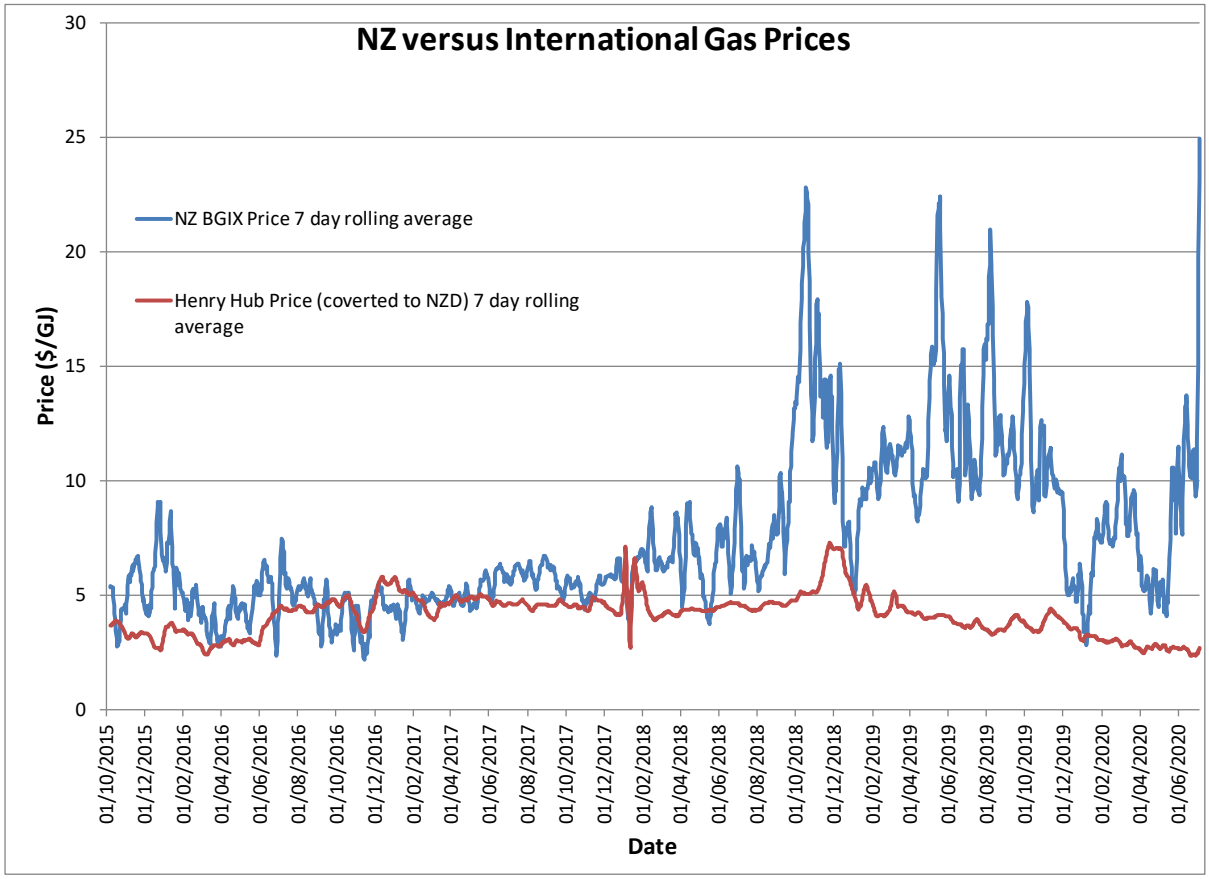
A quick survey of the last 10 years suggest at least 400 days in which North Island prices have been significantly above SI prices when the HVDC northward constraint has bound. The table below lists the first 25 (sorted by HAY2201 price) instances. A separately provided Excel file provides more detail.

Date	Average of Ratio HAY/BEN Price	Average of BEN2201 Price	Average of HAY2201 Price
06/09/2010	100.2	$ 50.11	$5,018.52
26/07/2016	50.1	$ 65.24	$3,416.55
03/11/2010	49.1	$ 50.93	$2,725.07
04/07/2010	2,786.5	$ 8.45	$1,484.35
17/03/2011	13.1	$ 91.22	$1,265.10
23/04/2018	20.9	$ 62.46	$1,234.69
26/03/2011	60.5	$ 19.72	$1,185.24
13/12/2011	17.5	$ 70.75	$1,154.25
07/03/2011	45.0	$ 22.06	$ 993.40
12/06/2018	6.1	$ 371.46	$ 895.71
02/07/2010	3.4	$ 258.35	$ 867.65
22/02/2011	85.4	$ 12.06	$ 851.24
21/02/2011	32.2	$ 29.37	$ 797.24
18/02/2010	13.7	$ 54.89	$ 689.57
14/08/2011	5.0	$ 132.29	$ 657.26
23/10/2018	1.8	$ 366.64	$ 648.99
01/11/2012	16.9	$ 33.56	$ 644.81
31/07/2017	3.4	$ 178.61	$ 629.64
24/11/2018	20,580.9	$ 0.03	$ 617.43
03/10/2013	7.7	$ 64.58	$ 557.40
13/07/2017	2.0	$ 239.08	$ 499.11
14/07/2017	2.7	$ 180.82	$ 493.79
27/01/2011	15.5	$ 41.45	$ 478.02
28/01/2011	16.2	$ 29.09	$ 471.73
02/05/2012	2.5	$ 185.42	$ 465.74

Also this approach only identifies instances where Meridian failed to avoid high North Island prices, not where its strategy succeeded.

Recent Changes in North Island Thermal Fuel Market

A key to North Island competitive pressure on prices is the availability and cost of thermal fuel. Thermal generators tend to be the marginal dispatchable generators in the North Island and any fuel constraints will often translate into higher electricity price offers. I have not done any detailed analysis of North Island thermal fuel competition and how this has changed in the last 3 years. However, the chart below suggests that NZ gas prices have escalated well above international gas prices since late 2017. This is already starting to impact NZ electricity prices overall. I suggest it could impact North Island thermal generator offers when there is less marginal competition from SI hydro, e.g. when the HVDC northward constraint binds.



Conclusion

The point of this analysis is to test the EA's assumption regarding North Island offer behaviour and competitive pressure on prices (spot and risk management products), when the HVDC northward constraint binds. This submission suggests a wider frame of reference for the UTS investigation. Taking into account a wider competitive framework and questioning whether the assumed counterfactual, of competitive pressure lowering North Island prices, is warranted.

Regards

Neil Walbran

Managing Director