6 April 2021

James Stevenson-Wallace
CEO
Electricity Authority

By e-mail: UTS@ea.govt.nz, compliance@ea.govt.nz

Dear James,

The December 2019 UTS remedy should ensure no market participant that was a party to or contributed to the UTS benefits financially from it

Electric Kiwi and Haast Energy Trading (Haast) recognise any remedy the Authority adopts cannot fully rectify what happened in December 2019. The Authority has been very clear spilt water cannot be unspilt. We consider, though, the Authority can and should go further in more fully remedying the financial impact of the December 2019 UTS than the draft proposal.

Summary of Electric Kiwi and Haast's views

- We agree "the Authority cannot perfectly resolve all of the consequences of the UTS that occurred in 2019 <u>because of the irreversibility of some aspects</u> – like the spill of water" [emphasis added] but it can and should fully remedy the impact of the unnecessary spill on December spot prices.

- We agree both Contact and Meridian's offer prices should be capped. We agree "… offers for stations on the Clutha/Mata-Au River … were also inconsistent with the abundance of water available for generation and contributed to the reduction in competitive pressure in the South Island".

- The offer price cap should include Manapouri. As the Authority noted, there were occasions where QWOPs for Manapouri spiked "for several hours at a time".

- We agree with the Authority "The scale of the proposed price reset is guided by the offer behaviour in the spot electricity market that would have occurred if there had been no UTS and the market was operating normally". Neither Contact nor Meridian could have established the $13.70/MWh offer price in real-time and it would not have been sufficient to avoid all unnecessary spill (only Benmore spill). The $13.70/MWh is an infeasible offer price as it could only be estimated retrospectively based on complex modelling.

- The UTS remedy should reflect that Contact and Meridian's hydro offers needed to reflect the value of water was zero to have surety they would not unnecessarily spill water. The mechanism described under 5.41(e) in the consultation paper is the only option which would have ensured spill was minimised across the Waitaki and Clutha systems, as well as Benmore.

- We are unsure how a $13.70/MWh offer price cap "during the UTS period would appropriately calibrate the expected degree of competitive pressure, given the abundance of water, driving offer behaviour <u>towards</u> rather than <u>to</u> short-run marginal cost" given it is nearly twice the Authority's estimate of SRMC (emphasis is the Authority's). The Authority should also be mindful of the distinction between offer prices and spot prices trending towards SRMC. For example, in the Genesis 2011 UTS decision, the Authority commented "a net pivotal generator's strategy of offering at SRMC would cause wholesale electricity prices to tend towards SRMC".[1]

[1] https://www.ea.govt.nz/assets/dms-assets/10/10703Final-Decision-and-Proposed-Actions.pdf

- Simply put, while prices should tend towards cost-reflective prices in workably competitive markets, prices should be lowest (and well below LRMC) when there is excess capacity and highest (ensuring prices are sufficient to recover LRMC over the long-term) when there is a shortage of capacity.

- We agree with the Authority that "any generator that supplied electricity at offer prices above the reset final prices, and whose offers were not revised by the actions to correct, would be treated as being constrained on and would be compensated according to their original offers". All of Contact and Meridian's electricity generation plants should be excluded from receiving constrained-on payments as part of the remedy.

- The need for constrained-on payments is a consequence of the UTS. The Authority should adjust the price offer cap down to ensure the constrained-on payments do not penalise wholesale electricity purchasers and end-users with higher prices than would have occurred if there had been no UTS.

- We agree with the proposed approach to FTRs and derivatives.

The Authority should base the price offer cap on the offer behaviour in the spot electricity market that would have occurred if there had been no UTS and the market was operating normally

The simplified modelling, based on a conservatively modelled $13.70/MWh price offer cap, the Authority used for its UTS decision may have been sufficient to establish there was a UTS but it is not able to capture the full scale of the undesirable trading e.g. the extent of water that was unnecessarily spilt and the full impact this had on spot prices. Accordingly, any remedy based on this simplified modelling will fall well short of compensating wholesale electricity purchasers and end-consumers for the harm caused by the UTS.

The Authority should not base the correction of offer prices on a "conservative" estimate of the offer price (the maximum offer price determined retrospectively) which would have avoided Benmore spilling unnecessarily. The $13.70/MWh price offer cap proposed in the consultation paper is far too high. If Contact and Meridian had adopted $13.70 as a cap on their offers in December 2019 they would have still spilled water unnecessarily, just not at Benmore or by as much. Spot prices would have still been higher than they should have been, given the market conditions at the time.

The $13.70/MWh is also an infeasible offer price as it could only be estimated retrospectively based on complex modelling.

Contact and Meridian could not undertake, in real-time the type of retrospective analysis to work out the highest price they could have gotten away with that the Authority has undertaken.

Electric Kiwi and Haast consider the Authority should adopt an offer price cap which reflects "the abundance of fuel (water)" and the Authority's expectation this "should have increased competitive pressure" and the real-time circumstances Contact and Meridian were in during the UTS period. Consistent with this, Meridian (the Brattle Group) has submitted:[2]

> The UTS investigation is being undertaken with the benefit of hindsight which diminishes the uncertainty of real-time hydro management. For real world analysis, Meridian's bidding conduct should be assessed within the real-time context of an extreme weather situation in which the primary focus was the management of water.

Contact and Meridian knew they were experiencing large, unprecedented, inflows and would have to spill some water. They should have made offers that reflected the zero value of water to avoid

[2] https://www.ea.govt.nz/assets/dms-assets/27/27395Meridian-Brattle-report-2019-UTS-Preliminary-Decision-Cross-Submission.PDF

unnecessarily spill water. This approach would align with the Meridian view that the UTS should be based on normal market behaviour.

The remedy should also recognise it wasn't just Aviemore, Benmore, Ōhau A, Ōhau B, Ōhau C, Clyde, Roxburgh, and Waitaki that unnecessarily spilt water, and that Manapouri did too. This has been documented (including quantified evidence) in the joint independent submissions. While it may be true as a general statement that "Offer prices at Manapōuri and Tekapo A and Tekapo B were predominantly low during the UTS period" (emphasis added to the qualification) this wasn't universally true and Manapouri offer prices overnight were higher than they should have been.

The Authority should not adopt a "conservative" approach that favours suppliers at the expense of the long-term in interests (benefit) of consumers

While any UTS remedy cannot include penalties nor should it include rewards. As the Authority's proposals stand, Contact and Meridian will remain financially better off due to prices being higher than they should have been in December 2019, even after the Authority adjusts the final spot prices. Meridian has been formerly on record as discounting the UTS remedy as only costing them $2m.[3]

The prospect Meridian could be compensated with "constrained on" payments for Manapouri because Meridian's high offer prices are above the final prices that will apply when the Authority corrects the December 2019 prices seems incongruent to us. Manapouri would get constrained on payments rewarding Meridian for offering tranches for Manapouri at high prices in some trading periods which did not reflect the market conditions at the timing or the level of hydro spill.

We don't believe market manipulation should be rewarded in this way.

Our preference is that any "constrained on" payments are funded by Contact and Meridian (netted of the revised prices they receive for the price capped generation), but otherwise that the Authority lowers its proposed offer price cap to ensure the remedy doesn't require consumers to pay higher prices (than if there was no UTS) to fund the payments.

We agree with the proposed approach to FTRs and derivatives

We agree with how the Authority has treated pass through of spot prices to FTRs and derivatives markets. We have not identified any other sensible way to deal with FTRs and derivatives.

We haven't heard a coherent explanation from Contact or Meridian about their UTS period conduct

Based on commentary provided by Meridian in submissions, at Authority workshops, to the Transport and Infrastructure Select Committee and in the media the explanations for the December 2019 trading/UTS have vacillated between historically unprecedented hydro inflows (act of god), resource consent issues, a confluence of factors with the 4 largest generators all culpable,[4] transmission constraints,[5] unsanctioned night trading activity that didn't reflect company instructions[6] and, contrary

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[3] Meridian presentation to the Transport and Infrastructure Select Committee. We note "The committee expressed its concern that Meridian stated its exposure at $2 million when its liability was still to be determined by the Electricity Authority at that time": https://www.parliament.nz/resource/en-NZ/SCR_109605/74da80425b984562d725e3bdd284ad56fa5d64a8.

[4] Meridian has incorrectly claimed "Given the confluence of factors identified by the authority it seems that a UTS would have occurred regardless" of its trading activity: https://www.stuff.co.nz/business/opinion-analysis/124378016/mps-are-failing-to-hold-electricity-giants-to-account

[5] e.g. https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12294391

[6] Neil Barclay to the Select Committee: "Where we fell short was some of … our trading over night locked in place some … trades or tranches that our management had instructed the team not to do but it hadn't quite got through because traders turned up at 7 o'clock at night read the instructions but may be didn't quite the comprehend them as well as we could …"

It isn't obvious how traders could be to blame for not reading instructions properly given the UTS went on for over three weeks between December 3 and 27 in 2019.

to the last explanation provided to the Select Committee, normal trading conduct/locational price risk management.

Meridian did not advise the Select Committee that its weekly Performance Reports contain direction to prevent transmission constraints.

The contrast between Meridian's statements to the Transport and Infrastructure Select Committee, including the subsequent 'clarifications', and their submissions to the Authority couldn't be more stark. Meridian couldn't be any clearer it considers deliberately spilling water is ok. It needs to own the consequences of its spill policy:

> "Spilling and making non-zero price offers is consistent with the normal operation of the wholesale market: The offer behaviour of Meridian (as described in Part B) is completely consistent with behaviour in the workably competitive electricity market. Throughout the last decade there have been many times in which a hydro generator has been spilling but offering at non-zero prices. This is not an idealised perfectly competitive market where the only rational response is to offer at the level of short run generation costs."
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> "Meridian considers its offer strategy to be economically rational behaviour … there are no requirements to offer based on costs … Meridian and other generators have implemented these tactics for many years."
>
> "generation is highly concentrated regionally … short-term demand responses are very inelastic at low-to-moderately-high spot prices … When these features of the spot market are taken into account, it is very predictable that there are times when offer prices will not fall to the low levels that might be "expected" despite spill occurring".
>
> "…hydro generators do not offer their generation based on a bottom up assessment of their costs, they … are economically rational in seeking to generate high volumes at prices the market will support … Commonplace strategies in this regard include … non-clearing tranches at high prices during periods of spill … and … offering some volumes at a price just below that of the next available source of generation from a competitor (this is economically rational behaviour and is to be expected in the New Zealand electricity market …" [emphasis added].

Of the various explanations Meridian has offered, the only plausible one is that the unnecessary spill was an outcome of Meridian's preference for profit maximisation and locational risk management, over security of supply, and environmental and CO_2 considerations. The Authority has been very clear this is "contrary to previous Authority advice to Meridian that we do not agree with using offers to manage transmission constraints" and "Evidence shows Meridian was offering in such a way as to ensure the HVDC was not constrained".

Distinguishing the 2011 and 2019 UTSs

We consider that contextual factors are relevant when considering the 2019 UTS and remedy. A distinguishing characteristic was that the Authority positively found "Genesis Energy's conduct was not unlawful, did not constitute manipulative or attempted manipulative trading activity, and did not amount to conduct in relation to trading that was misleading or deceptive, or likely to mislead or deceive".[7]

The Authority has made no such conclusion in relation to the Contact and Meridian conduct. It is abundantly clear from the Authority's UTS findings that market manipulation and exercise of market power occurred during December 2019:

> "… we considered that our assessment could be made without determining whether blameworthy conduct had occurred. We also note the separate HSOTC investigation that is in progress in relation to the actions of Meridian Energy and Contact Energy.
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> "... Meridian's use of what it terms "non-clearing tranches" means that generation is effectively withheld from the market.
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> " ... Meridian was able to increase its offer prices and withhold generation when spilling despite what Sapere terms "the massive increase in fuel available to [South Island] hydro generation".
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> " ... As Sapere points out, an increase in available fuel should have shifted the supply curve outwards, implying lower offers, lower prices, and more generation from South Island generators. But, in the event, the opposite happened. ...

[7] https://www.ea.govt.nz/assets/dms-assets/10/10844UTS-Committee-Final-Decision-on-UTS-and-Actions.pdf

"We note that Meridian uses the phrase "non-zero offer prices" to describe offers which it says are consistent with the normal operation of the market. However, this phrasing risks obscuring the fact that the level of offer prices – the highest of which Meridian describes as "non-clearing tranches"– effectively withheld generation from the market, at a time when there was widespread spilling. …

" ... analysis of generator offer behaviour during the UTS shows that offers for Meridian's Waitaki stations were high and increased during the UTS period. This is despite widespread spilling in the South Island implying an abundance of water. … this is inconsistent with supply-demand principles which the Authority considers participants would reasonably expect the market (operating with its ordinary levels of competitive pressure) to comply with. ...

"We found that the UTS extended from 3 December 2019 to 27 December 2019. During this time … we estimate the average extra generation Meridian could have achieved is 82MW, and around one third of the spill at Benmore could have been used to generate."

While the Authority determined there was a UTS "without determining whether blameworthy conduct had occurred" its findings mirror the definition of market manipulation. This would have precluded the Authority from being able to reach the 2011 UTS conclusion that manipulative trading conduct didn't occur.

The Authority's findings that "Market outcomes were different from those reasonably expected" and "The Authority agrees with the claimants that the prices and outcomes observed during the UTS investigation period were not consistent with supply and demand conditions (and therefore what might reasonably be expected if the market was operating normally)" align with the ACCC's guidance[8] in relation to Court precedent on the definition of market manipulation:

… market manipulation is centrally concerned with conduct, intentionally engaged in, which has resulted in a price which does not reflect the forces of supply and demand.[9]

The Authority's finding that Meridian withheld generation to avoid the HVDC link reaching capacity and "they did that to stop South Island prices reducing"[10] also corresponds with its observation "If there is evidence of firms withholding output at what should be a profitable price, this indicates some degree of market power being exercised".[11] The following highlighted measures of market conduct are particularly germaine:

Table 2 Measures of market conduct

Measure	Why important for competitive pressure in industry	Potential indicators
Price-cost relationship	Prices should reflect costs. If they are persistently higher, this suggests suppliers have market power.	Price-cost margin index; Lerner Index.
Revenue and input costs	In a competitive market, if input costs rise then marginal costs and marginal revenue rise by the same amount.	Panzar-Rosse H Statistic
Output	If there is evidence of firms withholding output at what should be a profitable price, this indicates some degree of market power being exercised.	Economic withholding analysis; Physical withholding analysis
Curious bids and offer	A large number of bids and offers that are hard to reconcile with profit-maximising behaviour in a competitive market is an indication that participants are trying to lessen competition	Number of bids that are hard to explain; plus published investigations into specific instances
Collusion opportunities	The more often the key participants have the opportunity to engage as a group, the higher the chance of joint actions that might lessen competition	% of suppliers who are members of an industry body; number of joint letters/submissions to regulators or Ministers

[8] ACCC, Guidelines on Part XICA - Prohibited conduct in the energy market, May 2020.
[9] See Director of Public Prosecutions (Cth) v JM (2013) 250 CLR 135 at [70].
[10] https://www.stuff.co.nz/business/124718335/select-committee-expresses-concern-over-meridian-evidence
[11] Electricity Authority, Industry and market monitoring: Competition Information paper, 31 August 2011.

Concluding remarks

We agree with the Authority "The scale of the proposed price reset is guided by the offer behaviour in the spot electricity market that would have occurred if there had been no UTS and the market was operating normally". The draft remedy falls short of this.

The Authority's should alter Contact and Meridian's December 2019 offer prices based on what it reasonably expects the generators should have done in real time to ensure as much of its hydro generation was dispatched as reasonably practicable. The offer prices should reflect the abundance of water, a zero opportunity cost, and that competition should have been increased by the surplus generation capacity. Offering in at no more than SRMC would have been the safest option to avoid unnecessary spill without being financially disadvantaged.

The offer price adjustments should not only include Aviemore, Benmore, Ōhau A, Ōhau B, Ōhau C, Clyde, Roxburgh, and Waitaki but should also extend to Manapouri. Any constrained on payments should not extend to Contact or Meridian.

We are fully cognisant any UTS remedy cannot include a penalty element, but a remedy based on a conservatively high offer price will penalise retailers with spot market exposure and, ultimately, end-consumers.

Any conservatism should be on the side of consumers and erring on a low offer cap(s), not on a high ($13.70/MWh) offer cap which will benefit and protect generators' commercial positions.

Yours sincerely,

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