

16 September 2020

Cross-submissions
Electricity Authority
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By email: UTS@ea.govt.nz

Cross-submission on Undesirable Trading Situation (UTS) Preliminary Decision

Contact has reviewed submissions on the preliminary decision. A number of submitters allege that Contact spilt excess water during the allegation period. **To be clear, Contact did not spill excess water during the alleged UTS.**

The UTS claim covers a period when significant flooding occurred in the lower South Island. Safety of our dams, people, plant and local communities is always Contact's paramount concern. During the flood event, Contact balanced safe and sensible generation in real-time with the safety of our plant, people, resource consents, and managing the health of the river.

Contact prudently managed these risks. Contact did not spill excess water and our actions did not threaten confidence in, or the integrity of, the wholesale market.

There are a range of views across submitters as to whether the facts support the Authority's preliminary finding of a UTS, how offers from the owners of South Island generation operating in flood conditions should be made, and how the wholesale market should operate.

From the submissions, it is evident that:

1. **No UTS occurred during the alleged period** - the facts do not support a conclusion that the alleged behaviour was outside the normal operation of the market, or inconsistent with electricity market rules. The evidence shows that Contact did not cause a UTS, and Contact was doing everything we could to manage river levels in an extreme event in a way which would reduce the risk of damage to plant and minimise the impact of the floods on the communities in which we operate.
2. **Modelling has significant limitations and ignores real-time flood management** – Contact has identified incorrect assumptions into, and inferences drawn from, Haast's modelling. The modelling fails to account for the real-time management of a significant flooding event. It retrospectively models an unachievable standard that assumes perfect information ex poste. Therefore it cannot be relied on.
3. **HVDC constraints were not a material consideration during the UTS period** – the Authority expresses concern that Meridian was actively managing the HVDC in its offer strategy, which it considers is inconsistent with the normal operation of the market. Meridian's evidence shows it was not a material consideration at that time. Similarly, it was not a material consideration for Contact.
4. **Managing transmission constraints are part of an efficient market** – The Authority's draft conclusion and some submitters' views is that managing transmission constraints through offers is inconsistent with workably competitive markets. Contact engaged NERA Economic

Consulting to review those views. NERA conclude that there are benefits from using offers to manage locational price risk in the New Zealand Energy Market. Any proposal to change the current rules must be done through a Code change process, rather than by stealth through the UTS process.

Contact supports the rapid conclusion to, and closure of, the UTS.

Our cross submission responds to these points in more detail.

Yours sincerely

A handwritten signature in black ink, appearing to be 'J. Kilty', written in a cursive style.

James Kilty
Deputy Chief Executive Officer

Contact Energy Cross-submission on UTS Preliminary Decision

Introduction

1. Contact welcomes the opportunity to cross-submit on the submissions made on the Electricity Authority's (**Authority**) preliminary decision that a UTS occurred in the period from 3 to 18 December 2019 (**Preliminary Decision**).
2. As previously submitted, Contact did not spill excess water during the alleged UTS. The UTS claim covers a period when significant flooding occurred in the lower South Island. During such times, Contact must balance safe and sensible generation in real-time with the safety of our plant, people, our consents, and managing the health of the river.
3. At all times during this event, Contact's focus was to prudently manage these risks. Our actions did not threaten confidence in, or the integrity of, the wholesale market.
4. The Authority's preliminary analysis concludes that actions taken by Meridian to avoid binding constraints led to a UTS. Contact disagrees with the Authority's preliminary conclusion. This cross-submission sets out Contact's response to submitters' allegations and views.
5. The changes that the Authority proposes to implement through the UTS are more properly dealt with through a Code change process. Until any such Code change has been made, there is no basis to challenge the behaviour of generators under the UTS in the trading periods in question.

1. No UTS occurred during the alleged period

Legal Framework

6. In order to make a finding of a UTS, a full understanding of the relevant facts, the correct interpretation of the UTS provisions of the Code, and a transparent and predictable application of this interpretation to the facts is required.
7. Some UTS submissions provide additional information to that relied on by the Authority in reaching its preliminary decision. No new information has been provided in submissions that changes Contact's view expressed in our original submission that no UTS occurred.

Legal standard

8. The first question to consider in a UTS proceeding is what circumstances can constitute a UTS.
9. Contact agrees with Meridian's submission that the language used in the Code, including the description of the examples of potentially undesirable conduct or activity in clause 5.1(2), and the nature of the corrective actions permitted by clause 5.2, suggests that a UTS has to be an exceptional circumstance, outside the normal operations of the market. As Sapere notes, "*UTS provisions exist in market rulebooks to cover unforeseen or exceptional*

situations.”¹ This is a high threshold which as the High Court noted would typically be a “one-off event of short duration”.

10. Offer behaviour that:

- can readily be explained by the extreme operating conditions faced by the relevant market participants;
- has frequently and transparently occurred in the past; and
- produces price outcomes within the ranges that occur under the normal operations of the market,

cannot constitute a UTS.

11. Haast et al² (**Haast**) appear to ask the Authority to read in novel UTS rules which simply don’t exist in the Code. They request that the Authority apply a rule of “too much” and “too long”. The UTS test is clear, and market participants must have regulatory certainty. New rules cannot be crafted on an ad hoc basis to suit particular parties’ commercial positions.

Relevant facts

12. The submissions on the Authority’s preliminary decision collectively explain that:

- non-zero prices at a time of spilling were not an uncommon market occurrence;
- pricing in tranches to maintain river levels and avoid excessive wear and tear on plant is a common and prudent strategy for hydro generators managing extreme flood conditions;
- offer strategies purposefully designed to avoid basis risk are also common across generators³;
- on this occasion, and contrary to the Authority’s preliminary view, the HVDC constraint was not in fact a driving factor in Meridian’s decision-making;
- spot price outcomes which occurred in the period from 3 to 18 December were not in a different scale to price outcomes in other periods; and
- the overall impact on consumers of the offer strategies adopted was not material⁴.

13. South Island generators were doing everything they could to manage river levels in an extreme event in a way which would reduce the risk of damage to their plant and minimise the impact of the floods on the communities in which they operate.

Application of facts

14. In light of these facts, it is not open to the Authority to find that a UTS has occurred.

¹ Sapere, *The Authority’s preliminary decision of an undesirable trading situation*, 17 August 2020, p.18

² Haast, Oji & Independent Retailers, *UTS preliminary decision submission*, 18 August 2020

⁴ Reference?

15. The particular circumstances of this event did not threaten confidence in the spot market or any related market as these circumstances were consistent with the normal operation of the spot market. No urgent action was required to respond to abnormal events.

16. On the contrary, the market had operated in a similar and open manner on a number of previous occasions, as traversed in detail in Meridian's submission:

... managing basis risk through transmission offers is part of the normal operation of the wholesale market, and has never previously been found by the Authority to constitute a UTS.⁵

... examples all show that generators have been entirely transparent with the Authority for over a decade that managing basis risk through generation offers is part of the normal operation of the market.⁶

17. As other submitters have noted, the Authority's preliminary decision rests on its hindsight analysis that:

- spot prices should have settled closer to Short Run Marginal Cost (SRMC);
- HVDC flows should have occurred in a different manner (greater northward flow); and/or
- there should have been lower spill levels.

18. However, these views are not elements of a UTS. It is not a matter of assessing the Authority's preferred outcomes. Instead, something that threatens, or may threaten, confidence in, or the integrity of, the wholesale market needs to have occurred, and which cannot satisfactorily be resolved by any other mechanism available under the Code.

19. We note other submitters⁷ share Contact's view that through this preliminary decision the Authority appears to be:

- (i) amending the established definitions of a UTS and the established approach to assessing whether or not market confidence has been adversely impacted;
- (ii) incorrectly applying the concept of workable competition; and/or
- (iii) attempting to introduce new offer rules without going through a Code change process.

20. Genesis and Mercury also comment on the ambiguity of the Authority's current views on transmission constraint management and the issues associated with relying on the FTR market for products to manage basis risk.

21. This is problematic as it undermines regulatory certainty and consistency.

⁵ Meridian, *Meridian Submission, Preliminary decision on claim of an undesirable trading situation*, 18 August 2020, p. 32

⁶ Meridian submission, p. 37

⁷ See for example Meridian's submission at pp. 47-50 and Trustpower submission at p. 2.

Regulatory Certainty is undermined by the Preliminary Decision

22. Meridian identifies that the Authority's preliminary decision is inconsistent with previous decisions made. There is little explanation provided for the potentially material change in approach. This raises concerns about regulatory certainty, the ability to assess materiality thresholds, and expectations ex ante.
23. Treasury have developed key principles for best practice regulation that should apply consistently across regulation in New Zealand.⁸ These key principles are:

Growth compatible	Proportional	Flexible / Durable	Certain / Predictable	Transparent / Accountable	Capable Regulators
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24. Contact agrees with other submitters that the preliminary decision, if finalised, would create significant uncertainty, and would be inconsistent with quality regulation. Treasury's principle of certainty / predictability is that

Regulated entities have certainty as to their legal obligations, and the regulatory regime provides predictability over time.

25. Best practice indicators of certainty / predictability include:
- Safe harbours being available and/or regulated entities have access to authoritative advice;
 - Decision-making criteria are clear and provide certainty on process; and
 - There is consistency between multiple regimes impacting on single regulated entities where appropriate.
26. Treasury identify facts that are "strong indications of material concern". These include:
- Overall objective not clear;
 - Regulated entities have no means of being sure to comply;
 - Inconsistent rulings not explained;
 - Inconsistency / conflict with analogous regimes;
 - Performance requirements not supported by adequate guidance; and
 - Compliance not consistently monitored or enforced.
27. Meridian submits that the Authority has misinterpreted and misapplied the UTS test, the preliminary view is inconsistent with previous decisions, normal operation of the market as a safe harbour has been ignored, and that the test is subjective and arbitrary.

⁸ See Treasury, *Best Practice Regulation: Principles and Assessments*, at <https://treasury.govt.nz/sites/default/files/2012-08/bpregpa-feb15.pdf>

28. Contact agrees with Meridian's submission that the preliminary finding raises significant regulatory uncertainty,⁹ and that normal operation is intended to be a UTS safe harbour which has not been considered by the Authority.
29. In contrast, Haast argue that "risk of creating a de facto unnecessary spill / monopoly pricing 'safe harbour' should be avoided".¹⁰ If a UTS is found, it would result in generators being held to an undefined amorphous standard that assumes away real operational risk and assumes perfect foresight.
30. We also agree with Trustpower that "any reset of the boundaries for behaviour within the market should occur ex-ante through an appropriate regulatory instrument (i.e. code change, issuance of guidelines etc.)."¹¹
31. Regulatory uncertainty will reduce confidence to make significant investments in new generation, and will adversely impact investment need to accelerate electrification and decarbonise the economy.
32. The concerns raised by submitters demonstrate that the UTS preliminary decision is inconsistent with best practice certain and predictable regulation.

2. *Modelling has significant limitations and ignores real-time flood management*

33. Contact has reviewed the modelling presented in submissions. Contact has identified a number of incorrect assumptions in the modelling that result in Haast concluding:

*"[i]f Contact had been the only South Island generator to unnecessarily spill water, spot prices would have still been \$39m more than they should between 11 November and 2 December, and \$52m more than they should have been between 11 November and 28 December. "*¹²

34. As previously noted, there was no unnecessary spill because Contact's primary objective was managing flood flows in a stable manner, while minimising the impact on our plant and ensuring the safety of our communities.
35. Modelling alternative hypothetical market outcomes after an event is always likely to inherently provide superfluous insights and conclusions. Such modelling is unable to account for the fact that:
 - Generators do not enjoy the benefit of 20/20 hindsight or full knowledge of competitive positions and constraints.

⁹ Meridian note that "it is now not clear when behaviour is material enough to constitute a UTS nor whether Meridian's behaviour or market outcomes cause the finding of a UTS. P.11

¹⁰ Haast submission, p.8

¹¹ Trustpower submission, *The Authority's preliminary decision on claim of an Undesirable Trading Situation*, p.2

¹² Haast submission, p.1

- Market participants positions change dynamically over time in response to competitors positions. The modelling assumes all competitors positions are held constant.
- Generators have obligations to balance safe and sensible generation in real-time with the safety of our plant, people, downstream communities we operate in, our consents, and managing the health of the river.

36. Modelling such a complex and dynamic market is challenging.

37. Contact has identified the following material errors in Haast's modelling. It:

- overstates the continuous capacity of the Clutha stations because the dispensation that is in place to operate at that level only applies when voltage support is not required and favourable hydraulic head conditions can be met;
- models a reduced level of generation in "just_ctct_spilling (\$0.01/MWh)" than our actual generation;
- takes no consideration of the reserves that were supplied by Contact over the period.
- takes no consideration of the frequency keeping support supplied by Contact over the period
- assumes for the modelled period that competing generators did not respond with competitive positions. For example, Contact offered in such a way as to avoid marginal running, to avoid exacerbating flood conditions. If Contact had offered in the way modelled by Haast, it is very likely that other generators response would have resulted in increased marginal running, which the model is unable to account for.
- Haast modelled a hypothetical "Actual" Clutha generation 27 GWh lower (from 10 Nov to 28 Dec) than what was actually generated, further inflating the estimated unnecessary spill.
- In total Haast have modelled Clyde to exceed 432 MW 42% of the time and Roxburgh exceeding 320 MW 13% of the time.

38. In summary, the modelling is neither accurate, comprehensive nor reliable, and cannot be used to support Haast's incorrect assertion that Contact was unnecessarily spilling excess water.

3. HVDC constraints were not actively managed during the UTS period

39. The preliminary decision took issue with Meridian's offer behaviour to manage HVDC transmission constraints, and concluded that Meridian's actions resulted in a UTS. Meridian's submission explains that the risk of the HVDC was not a significant factor in Meridian's decision making.

- 40. For clarity, Contact did not actively manage HVDC transmission constraint during the UTS allegation period.
- 41. As set out in our legal analysis, the HVDC concerns raised by the Authority are not material to whether a UTS was caused.

Managing transmission constraints

- 42. The UTS is not the appropriate mechanism to manage concerns that the Authority may have with transmission constraints. The UTS is not a mechanism to change policy and Code.
- 43. The Authority should allow the MDAG work to run its course, consider and consult on their recommendations in respect to HSOTC, and amend the Code if it is ultimately determined necessary to address how transmission constraints should be managed. This might include Meridian's suggestion that rules are developed for the construction of offer stacks for spilling hydro generation. This would require significant consultation and further consideration given to the range of operational, environmental and hydrological constraints.
- 44. However, consistent with the views of a number of other submitters¹³, Contact does not support the Authority's view that managing transmission constraints is inconsistent with a competitive wholesale energy-only market.
- 45. As we set out in the preceding section, Contact explains why managing transmission constraints can be consistent with workable competition.

4. Managing transmission constraints are part of an efficient market

- 46. In its preliminary decision, the Authority notes "outcomes in the spot market did not meet our expectations".

Evidence shows Meridian was offering in such a way as to ensure the HVDC was not constrained. Managing the HVDC in this way benefits all South Island generator (and North Island net retailers) by preventing spot price separation between the North and South Islands.¹⁴

- 47. Haast submits that "Contact and Meridian were both trying to avoid price separation", and "the Authority should reject the idea that generators can use offers to seek to achieve a certain mode of dispatch."¹⁵
- 48. Contact engaged NERA Economic Consultants to provide independent advice on the management of transmission constraints, review parties submissions and the expert advice provided by Brattle Group¹⁶ and Sapere¹⁷. Annex A provides NERA's detailed report.

¹³ Mercury, Meridian, Genesis, Brattle and Sapere

¹⁴ Electricity Authority, *The Authority's preliminary decision on claim of an undesirable trading situation*, 30 June 2020, p.iii

¹⁵ Haast submission, p. 25

¹⁶ The Brattle Group, *New Zealand Electricity Authority's Preliminary Decision on UTS*, 18 August 2020.

¹⁷ Sapere, *The Authority's preliminary decision of an undesirable trading situation*, 17 August 2020.

49. Many submitters identify that managing transmission constraints is an established feature of the energy-only market. As previously noted, Contact disagrees with the Authority's preliminary conclusion that Meridian's purported management of the HVDC constraint caused a UTS.
50. Contact is concerned about the wider potential impact of the Authority's preliminary views on an energy-only market if generators are unable to manage transmission constraints or recover their costs in the long term.

Managing constraints is an efficient feature of the New Zealand Energy Market

51. The structure of the New Zealand wholesale electricity market means that generators must recover variable and fixed costs through a single per unit price. As NERA explain:

New Zealand has an energy-only wholesale market where generators receive the market clearing price, rather than the price they bid. Variable and fixed costs must therefore be recovered through a single per unit price. Like in most real-world, workably competitive markets, generators need to find opportunities to recover their fixed as well as their marginal costs,

Prices will need to exceed SRMC frequently enough, and by enough, to recover those fixed costs. Over time, electricity prices in a workably competitive wholesale market will average the long-run marginal cost ("LRMC") of new entrant power stations, although will spend periods of time both above and below this level.¹⁸

52. The nodal structure and transitional constraints mean that market participants face locational price risk. As NERA explain:

Nodal prices are designed to provide locational signals for investment (other factors such as land and fuel availability can also have a determinative impact on locational decisions).

But if the locational price risk cannot be managed, it can deter socially valuable decisions, such as expansion by a generator into retail at a different location or a willingness to enter into hedge contracts at nodes besides those which a participant is connected to.

53. Financial Transmission Rights (FTRs) can be used to manage nodal risk. However NERA identify the practical limitations of FTRs to manage all locational risk:

- The hub model and scaling of volume of FTRs is less than the physical capacity and can leave participants exposed to locational price risk.
- Continuous FTRs are a coarse hedge for infrequent, irregular events and plant with variable output.

¹⁸ NERA, *Managing constraint risk in the NZEM*, Contact Energy, 16 Sept 2020, p.2

54. Submissions from Genesis and Mercury similarly note that FTRs are not well suited for events such as the unpredictable inflows faced by South Island generators in December 2019. Meridian, Genesis and Mercury note the limitations of FTRs, and the fact that they are coarse, crowded out by non-physical participants and are subject to scaling following revenue inadequacy.¹⁹
55. NERA identify factors that can impact the effectiveness of FTRs as a risk management techniques:²⁰
- the capacity scaling process prior to the auction results in a volume of FTRs being sold which is less than the physical capacity of the line;
 - continuous FTRs are a coarse hedge for plants that generate at certain times of the day;
 - fixed volume FTRs are a coarse hedge for plants that have a variable generation profile;
 - continuous FTRs are a coarse instrument for hedging infrequent and extreme events;
 - non-physical participants may increase the efficiency of FTR pricing, but this could crowd out physical participants; and
 - a lack of firmness can leave residual constrain risk for FTR holders.
56. NERA identify the benefits from using offers to manage locational price risk, in addition to FTRs.
- As the Authority has pointed out, there are also costs to using this mechanism. However:*
- i. All risk management techniques involve a cost, which will ultimately fall on customers;*
 - ii. Using offers to manage constraints can result in a reallocation of the congestion rent without material (or indeed any) changes in dispatch/short run efficiency; and*
 - iii. There are costs to not having a tool to manage these risks (e.g., reduced retail competition.*
57. NERA conclude that “the current UTS investigation has not conducted an analysis of the costs and benefits of such a ban” and that “given the current market arrangements and grid, **there may be net costs from an effective ban on using physical offers to manage constraint risk, even between nodes where an FTR exists.**”
58. Contact’s view is that managing transmission constraints is outside the scope of the current UTS proceeding. NERA’s analysis highlights the potential economic detriment if the Authority prohibited its use to managing risk. In any event, further detailed analysis and

¹⁹ Meridian submission, p.21, Genesis submission, para. 27, Mercury submission, p.2.

²⁰ NERA, pp. 18 - 21

consultation would be necessary to fully understand the impact on the New Zealand Electricity Market.

Short Run Marginal Costs

59. Haast submit that “[t]he analysis we have undertaken suggests the alleged unnecessary spill/pricing above SRMC resulted in excess spot prices”,²¹ suggesting that generators are required to always offer at Short Run Marginal Cost (SRMC).
60. The market design of the New Zealand Electricity Market is an energy-only one, where fixed and capital costs must be recovered through a single per unit price. As NERA note in their report:

...if outturn prices only reflect SRMC on average, there will be “missing money” and generators will not be able to recover their fixed and capital costs. This cost recovery, and therefore investment, in energy-only markets relies on either:

- a. Periods of both very high and very low prices which result in an average price that provides for fixed and capital cost recovery; or*
- b. Less volatile price levels that more closely equate to the price which provides for fixed and capital cost recovery.*

This is, of course, not a problem limited to electricity. In most real-world, workably competitive markets, firms need to find opportunities to recover their fixed as well as their marginal costs (e.g., hotels will vary their room rates based on demand (“yield management”) but will seldom price down to short run marginal cost (“SRMC”)). Indeed, over time workably competitive market prices will average the LRMC of new entry.²²

...There will be time when the price is lower and times when the price is higher. However, in the long run price will trend towards LRMC even as LRMC moves around.

61. This is consistent with the *Wellington International Airport Limited*²³ case

Of course, firms may earn higher than normal rates of return for extended periods. On the other hand, firms may earn rates of return less than they expected and less than commensurate with the risks faced by their owners when they made their investments. They may even make losses for extended periods. Prices in workably competitive markets may never exactly reflect efficient costs, including a normal rate of return.

But the tendencies in workably competitive markets are towards such returns and prices.

[Emphasis added]

²¹ Haast submission, p.22

²² NERA, para. 28

²³ *Wellington International Airport Ltd & Ors v Commerce Commission* [2013] NZHC 3289, 11 December 2013

62. The Authority's preliminary view would result in a material departure from its previous view on price discovery in an Energy Only market. As Meridian submit, "the Authority has in the past been careful to allow the market to perform the price discovery role, whereas the present approach is a form of shadow price control."²⁴
63. We also agree with Meridian that it is well established in "New Zealand case law that the workably competitive market construct does not enable predictions to be made as to short run market outcomes, rather it is a theory about the tendencies of such markets over time."
64. The potential significance of the UTS preliminary decision is clear. Brattle Group notes that if the Authority sought to limit generators' offers to SRMC, alternative design options would be required to provide the opportunities for generators in New Zealand to recover their opportunity costs,²⁵ including whether it would be necessary to create a separate market that compensates generators for providing reliability.

²⁴ Meridian, p. 60

²⁵ Brattle, p. 2

ANNEX A – NERA REPORT