

**IN THE MATTER of the
Electricity Act 1992**

AND

**IN THE MATTER of the
Electricity Governance
Regulations 2003**

**DECISION OF THE ELECTRICITY COMMISSION PURSUANT TO PART 3 OF THE
ELECTRICITY GOVERNANCE REGULATIONS 2003 REGARDING AN ALLEGED
UNDESIRABLE TRADING SITUATION ON 13 FEBRUARY 2009**

Decision dated 10 March 2009

Decision of the Electricity Commission pursuant to Part 3 of the Electricity Governance Regulations 2003 regarding an alleged undesirable trading situation on 13 February 2009

Introduction

1. Under Part 3 of the Electricity Governance Regulations 2003 (regulations), the Electricity Commission (Commission) is responsible for investigating undesirable trading situations (UTS) and, if the Commission finds that a UTS is developing or has developed, it may take steps in relation to that UTS.
2. This document sets out the reasons for a decision by the Commission that the circumstances existing on 13 February 2009 in respect of the claim made by Contact Energy Limited (Contact) do not constitute a UTS.
3. The decision was made by the Undesirable Trading Situation Committee (Committee), being the committee of the Commission to which decision-making under Part 3 of the regulations has been delegated. The membership of that Committee comprises all members of the Board of the Commission.

Claim of Undesirable Trading Situation by Contact

4. On Wednesday 18 February 2009 Contact Energy Ltd (Contact) claimed the existence of a UTS in respect of "would be final prices" for trading period 24 on Friday 13 February 2009.
5. In its claim Contact stated that it did not believe that:
 - (a) the pricing solution calculated by the pricing manager reflected actual market conditions; and
 - (b) the price of approximately \$7,000 at the Lichfield node represented the intersection of supply and demand.
6. These "would be final prices" followed on from the provisional prices initially published in respect of trading period 24. Because the provisional prices indicated an infeasibility and high spring washer effect, the pricing manager recalculated the provisional prices in accordance with the Rules and arrived at prices that would otherwise have been final prices but for the Commissions' order to delay publication of final prices.
7. Contact estimated that if these "would be final prices" became final prices it would have approximately \$200,000 "exposed".
8. Contact specifically requested that:

- (a) the Commission verify “that the SPD inputs (in particular the susceptances/reactances of all upper North Island circuits) are correct before proceeding with the spring washer methodology as prescribed in the EGRs”; and
 - (b) if, following this review the spring washer “anomaly” remained, the Board consider capping prices for trading period 24 at a price equal to the highest energy offer price for this trading period.
9. Contact also suggested that capping prices be utilised for all periods where the energy price exceeded the highest energy offer price.
 10. Trading period 24 coincided with the timing of the failure of Otahuhu-Whakamaru circuit 2 (OTA-WKM 2) and the tripping of Otahuhu B power station on 13 February 2009. On that day two participants expressed concern to the Commission at the unusually high real-time prices that were indicated for that trading period and suggested that they may claim a UTS if similar prices were likely to be published as final.
 11. In anticipation of such a claim and to allow a thorough investigation into the prices the Chair of the Commission, acting under delegated authority from the Board, ordered the delay of publication of final prices for Friday 13 February 2009.

Action by Commission

12. Investigations into the circumstances of the claim included discussions with Contact, the system operator and the pricing manager. Relevant information was also provided by a number of other participants.
13. A report from the pricing manager on matters relevant to the UTS claim was provided to the Committee.
14. The Commission notified market participants on 18 February 2009 that the UTS claim had been received.

Events and information relevant to the UTS claim

15. At 10.38am on Friday 13 February 2009 the system operator issued a nationwide frequency and voltage excursion notice advising of the tripping of Otahuhu B power station with the loss of 320MW of generation. This tripping is believed to have been caused by the failure of the OTA-WKM 2 transmission circuit which immediately preceded it.
16. Both the real time prices and provisional prices that were indicated for trading period 24 were extremely high at some nodes (approximately \$73,000 at Lichfield) and extremely low at others (approximately -\$9,900 at Tauranga).

17. The pricing manager's initial calculations of final prices indicated (among other things) an infeasibility for trading period 24. When this was resolved (by changing the equation constraint limit) a high spring washer price (HSWP) situation emerged for the same trading period.
18. A "spring washer" is the term given to prices that result from the flow of electricity around a loop from a constrained circuit in the electricity grid. Prices on one side of the constraint are usually quite high while prices on the other side of the constraint are relatively low. A "high" spring washer is when the price differential across the constrained circuit is high (as defined in the Rules).
19. The pricing manager followed the process in the Rules for responding to HSWP situations. The prices so calculated met all the requirements under the Rules for final prices and, but for the order to delay the publication of final prices, would have otherwise been published as final prices.
20. On Tuesday 17 February 2009 the pricing manager released a notice to advise participants of the issues related to the delay the final prices and included a file of the "would-be-final prices".
21. Although the "would-be-final prices" were still relatively very high (at their highest approximately \$7,500 at Lichfield and at their lowest approximately -\$250 at Tauranga indicating that a HSWP still existed) there was nothing to indicate that they had been calculated incorrectly.
22. The fact that a HSWP still existed after the related recalculation processes under the Rules does not of itself mean that such process has not been applied correctly or that valid prices have not been produced.

Is there an undesirable trading situation?

23. The definition of undesirable trading situation is set out in regulation 55(1) of the regulations which states:
 - "(1) An undesirable trading situation means any contingency or event—*
 - (a) that threatens, or may threaten, trading on the wholesale market for electricity and that would, or would be likely to, preclude the maintenance of orderly trading or proper settlement of the trade; and*
 - (b) that, in the reasonable opinion of the Board, cannot satisfactorily be resolved by any other mechanism available under the rules."*
24. Regulation 55(2) provides examples (without limitation) of the types of circumstances that may constitute an undesirable trading situation. It is not necessary that the contingency or event falls into one of the categories listed in

regulation 55(2). Regulation 55(2) merely suggests the types of situations in which an undesirable trading situation may be considered to have occurred.

25. Regulation 55(2) states:

“(2) Without limiting subclause (1), an “undesirable trading situation” includes—

- (a) manipulative or attempted manipulative trading activity:*
- (b) conduct in relation to trading that is misleading or deceptive, or likely to mislead or deceive:*
- (c) unwarranted speculation or an undesirable practice:*
- (d) material breach of any law:*
- (e) any exceptional or unforeseen circumstance that is at variance with, or that threatens or may threaten, generally accepted principles of trading or the public interest.”*

26. The Commission does not consider that the circumstances giving rise to the UTS claim by Contact fall within any of the specific situations described in paragraphs (a) to (e) of regulation 55(2).

27. The Commission therefore needs to consider whether the test in regulation 55(1)(a) has been satisfied. Here the Commission is required to first consider whether the circumstances giving rise to the UTS claim threaten, or may threaten, trading on the wholesale market for electricity and that would or would be likely to preclude the orderly trading or proper settlement of trades.

28. The regulations do not set out what is meant by “threatening” trading on the wholesale market. The Commission considers that, for an event to be considered as threatening (or possibly threatening) trading on the wholesale market, the event must be such that participants’ confidence in the market is significantly affected, that daily trading is affected by withdrawal (or likely withdrawal) of participants, or similar such circumstances.

29. As the Commission has previously stated, very high or very low prices do not of themselves indicate a threat to orderly trading. The presence of a HSWP would not necessarily be considered abnormal or unusual particularly in stressed circumstances such as those that existed for trading period 24 on 13 February 2009.

30. These stressed circumstances included the coincidental failure of a major transmission circuit and a large generation plant which necessitated operating at

“n” security and the closure of the reserves market and the subsequent return to n-1 security and the re-instatement of the reserves market for trading period 24.

31. Contact has raised concerns about the high level of prices. It is true that some of the prices are many times in excess of the highest price otherwise offered for energy in the period and that they may not at first glance appear to represent the “intersection of supply and demand”. However, in the circumstances that prevailed at the time the factors which determined price related more to co-optimising the additional requirements for energy and matching reserves that came about from the constraints that arose rather than what the highest offered price for energy would otherwise have been.
32. The key factor which influenced price was the marginal cost of the additional reserves that needed to be dispatched which in turn set the price for all reserves that needed to be marshalled and dispatched to match the additional energy that was required.
33. These prices were real prices notwithstanding that they bore little relation to the price which had been offered for energy.
34. The system operator has confirmed that there is nothing to indicate that the SPD inputs were incorrect and the occurrence of high prices (which is not considered to be necessarily unusual given the surrounding events) does not of itself warrant putting the system operator to the considerable exercise of verifying all those inputs for the period.
35. The pricing manager has also confirmed that the inputs to their price calculation (which would have gone final but for the Commission’s order to delay) are also correct and that the outcome is in compliance with the Rules.
36. Nothing about the circumstances of the calculation of the final prices can be said to threaten trading on the wholesale market in the sense that participants’ confidence in the market does not appear to have been or is likely to be affected to an extent that daily trading is being withdrawn (or likely to be withdrawn). Settlement on 20 March 2009 for the month of February 2009 is expected to be orderly albeit with some prices higher than might ordinarily have been expected if the physical events of 13 February had not occurred.
37. The Commission therefore considers that the criteria set out in regulation 55(1)(a) have not been met in relation to the UTS claim.
38. Accordingly, because the first limb of regulation 55(1) has not been met and in order for a UTS to exist both limbs must be met, the Commission does not need to consider whether the second limb of regulation 55(1) (that the case cannot be satisfactorily resolved by any other mechanism under the rules) has been met.

Remedies

39. As the Commission's finding is that a UTS does not exist, it has not examined possible remedies under regulation 56 in detail. However, it did briefly consider Contact's proposed capping solution in the context of the UTS regime.
40. Because the highest offered price for energy is not always the main determinant of price, the Commission would treat the option of capping prices at that level with some caution.
41. It is worth noting that the Commission is looking at the issue of caps on prices under its Market Design Project and that pricing inputs are being reviewed as part of the Pricing Process Improvement Project.

Conclusion

42. The decision of the Commission is that the circumstances of 13 February 2009 giving rise to the UTS claim by Contact do not meet the regulatory requirements for an undesirable trading situation.

**Electricity Commission
Wellington
10 March 2009
UTS Decision 8**