

**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 28 APRIL 2006**

Decision dated 30 August 2006

Decision of the Electricity Commission pursuant to Part 3 of the Electricity Governance Regulations 2003 regarding an alleged undesirable trading situation on 28 April 2006

Introduction

1. Under Part 3 of the Electricity Governance Regulations 2003 (“the regulations”), the Electricity Commission is responsible for investigating undesirable trading situations and, if the Commission finds that an undesirable trading situation is developing or has developed, it may take steps in relation to that undesirable trading situation.
2. This document sets out the reasons for a decision by the Commission (notified to market participants on 14 July 2006), that the circumstances existing at the Wilton grid exit point (“GXP”) in trading period 35 on 28 April 2006 do not constitute an undesirable trading situation. The decision was made by a majority of the Undesirable Trading Situation Committee (“the Committee”), being the committee of the Electricity 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.
3. Committee member David Close has written a separate minority decision which is included at the end of this decision.

Background – Claim of Undesirable Trading Situation by Genesis

4. In trading period 35 on Friday 28 April 2006 a “spring washer” effect occurred affecting the Wilton GXP. The effect was that the Wilton GXP price was negative \$369/MWh. Adjacent GXPs experienced high positive final prices of between approximately \$1,500 to \$2,000/MWh.
5. Final prices were published for trading period 35 at 8.06am on Saturday 29 April 2006.
6. On Monday 1 May 2006, the Commission staff received from Genesis Power Limited (trading as Genesis Energy) (“Genesis”) a claim that the circumstances in trading period 35 on Friday 28 April constituted an undesirable trading situation under regulation 55 of the regulations (“UTS claim”).
7. The UTS claim set out the grounds under which Genesis alleged an undesirable trading situation exists. In the UTS claim, Genesis stated:

“Genesis Energy considers that there may have been an error in the SPD model used for the calculation of final price for 28-April-2006 which will result in the improper settlement of trades. In particular Genesis Energy would like to draw to the attention of the Board the final prices for trading period 35 at Wilton, Haywards, and Greytown and surrounding areas”.

(paragraph 1 of the UTS claim)

8. Genesis also stated that it considered that the error may have had an effect on pricing schedules, final prices, and provisional prices in other trading periods on subsequent days.
9. In the UTS claim Genesis sought relief in the following terms:

“Genesis Energy considers that as final price has already been published for trading period 35 on 28-april-2006 which may contain errors, the Board should direct that any trades affected by this error for that trading period and any other trading period the Board considers appropriate be closed out or settled at a specified price, as per EGR 56(2)(b).

Furthermore, considering that price anomalies seem to be continuing around the Wilton area and in the various published schedules, that until it can be confirmed that the cause of the error has been removed or resolved to the satisfaction of the Board, the Board orders the delay in the calculation of subsequent final prices as per rule 3.28 of Part G Section V.”

(paragraph 2 of the UTS claim)

10. Genesis stated that it considered that the circumstances in trading period 35 appear to have arisen when the WIL_T8 constraint at Wilton bound after the system operator failed to remove an adjacent constraint when modelling the outage of the WIL_T8 constraint.
11. As a result of this failure, Genesis claimed that it suffered a loss of \$130,000 in relation to trading period 35 on 28 April 2006.

Commission investigation

12. The Commission commenced a preliminary investigation when it received the UTS claim on 1 May 2006. The preliminary investigation included conducting discussions with the pricing manager, clearing manager, and system operator.
13. On 2 May 2006, the system operator advised the Commission that a scheduling, pricing, and dispatch (SPD) modelling error had occurred that affected final prices in trading period 35 for the Wilton GXP and adjacent GXPs. The system operator confirmed that this error had been corrected in subsequent trading periods for that day.
14. The information provided by the system operator was supported by evidence from the pricing manager that prices for trading periods after trading period 35 had returned to relative normal.
15. Accordingly, the Commission notified market participants that it would not exercise its power under rule 3.28 of section V of part G of the Electricity Governance Rules 2003 (“the rules”) to delay publication of final prices for trading periods after trading period 35 on 28 April 2006.
16. The system operator has since notified that it admits breaching rule 1.3.4.7 of schedule G6 of part G of the rules by failing to correctly incorporate grid owner information relating to the WIL_T8 constraint into the dispatch schedule in relation to trading period 35, and trading periods 29 to 31 on 29 April 2006.
17. The Commission’s own inquiries concluded that the cause of the anomalous prices at the Wilton GXP and other nodes during trading period 35 was that the WIL_T8 constraint

bound due to a failure by the system operator to model the grid owner re-rating for the Wilton transformer after an outage on the Takapu Road - Wilton circuit 1.

18. The Commission requested the clearing manager prepare an assessment of the financial impact of the event. The clearing manager's assessment indicates that generators were overpaid by \$31,441.14 and purchasers were overcharged by \$256,229.29, with the net difference of \$224,788.16 being captured within the loss and constraint excess payments to Transpower as grid owner.
19. Total purchases by all purchasers of electricity during April 2006¹ were \$410,609,864.79. The net loss suffered by participants (\$224,788.16) is equivalent to 0.05% of total purchases during that month.

Previous decision – Undesirable Trading Situation in the Bay of Plenty during Trading Period 36 on Saturday 24 April 2004

20. In order to assist its decision making in respect of the circumstances of this alleged UTS, the Commission has reflected on previous UTS decisions of the Commission, in particular, the Commission's decision of 12 May 2004 that the circumstances existing in the Bay of Plenty during trading period 36 on Saturday 24 April 2005 constituted an undesirable trading situation under regulation 55 of the regulations.
21. Those circumstances arose when a constraint bound due to an error (the relevant constraint was meant to have been removed from the model) and five minute prices spiked. The Commission became aware of the issue before final prices were published and therefore exercised its discretion to delay publication of final prices under rule 3.28 of section V of part G of the rules.
22. The Commission sees these circumstances as most analogous to the current Genesis UTS claim. However, it does not consider that the Bay of Plenty decision is a precedent for the circumstances that relate to the UTS claim by Genesis.
23. In the Bay of Plenty case, the Commission was able to exercise its power to delay final prices. In that context, the Commission stated:

“The Commission notes it is very aware of the importance placed over time by market participants on the certainty of final prices, as reflected now in Rule 3.27. It considers, however, that where action is able to be taken in response to a UTS prior to the publication of final prices, the taking of such action is not at odds with that principle.” (emphasis added)

(paragraph 59 of the Bay of Plenty decision)

24. Further, the Commission, in reaching its conclusion, emphasised the following factors:

“(a) that the error was (in hindsight) obvious and has been acknowledged;

¹ Note this report has been corrected. Previously the \$410,609,864.79 was incorrectly described as the purchases for the day.

- (b) *that it has been discovered in a timely fashion, publication of final prices has been delayed and, therefore, **appropriate adjustments can be made without affecting the value placed by the market on the certainty of final prices;***
(emphasis added)
- (c) *that requiring market participants to accept the adverse consequences of manifest errors is not, **subject to the value placed on the certainty of final prices reflected in Rule 3.27 of Part G Section V,** in the interest of the maintenance of trading in an orderly and proper manner;*
(emphasis added)
- (d) *that, in these circumstances, a fine would (if available) not satisfactorily address the issue because, notwithstanding that a fine may be imposed, market participants would be left with an outcome that did not fully address the consequences of the error and that may not be particularly timely; and*
- (e) *the relevance of the earlier MSC/NZEM decisions in similar situations.”*

(paragraph 64 of the Bay of Plenty decision)

25. The Commission’s decision hinged to a significant extent on the fact that final prices in that case had not been published. No conflict arose between correcting erroneous inputs into final prices and the principle of certainty of final prices.
26. In contrast, in the circumstances giving rise to the UTS claim by Genesis, final prices for the relevant trading period have been published, and rule 3.27 provides that those prices cannot be republished even if an undesirable trading situation was found to exist. Rule 3.27 also provides that prices remain final even if subsequently errors have occurred in the process to finalise those prices.
27. Accordingly, it is necessary for the Commission to consider the circumstances giving rise to the UTS claim by Genesis from first principles.

Is there an undesirable trading situation?

28. 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.”*

29. Regulation 55(2) provides examples (without limitation) of the types of circumstances that may constitute an undesirable trading situation. 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.*

30. Accordingly, in determining whether the circumstances giving rise to the UTS claim by Genesis constitute an undesirable trading situation, the Commission first considered whether the circumstances fell within any of paragraphs (a) to (e) of regulation 55(2).
31. The Commission notes that regulation 55(2) does not limit the circumstances that may constitute an undesirable trading situation under regulation 55(1). However, the Commission considers that an analysis of this sub-clause assists an understanding of the sorts of circumstances that the undesirable trading situation regime was designed to address. Taking each paragraph of sub-clause (2) in turn, the Commission has the following comments.

Regulation 55(2)

Paragraph (a)

32. There is no evidence of any manipulative, or attempted manipulative, trading activity. “Manipulation” has a pejorative connotation, suggesting that the relevant conduct has been carried out in order to advantage one or more market participants to the disadvantage of other participant(s). The Commission does not consider that paragraph (a) applies.

Paragraph (b)

33. It is arguable that the failure to correctly model the removal of the constraint may constitute conduct that is “misleading or deceptive, or likely to mislead or deceive”. However, the Commission does not consider that paragraph (b) can be interpreted as being intended to cover a simple mistake on the part of the system operator, particularly in circumstances where the mistake gives rise to a breach of the rules.

Paragraph (c)

34. The Commission does not consider that paragraph (c) applies. On the basis of the Commission’s investigation the system operator did not engage in any “unwarranted speculation”, nor an undesirable practice. The phrase “undesirable practice” has a pejorative connotation which the Commission does not think would capture an inadvertent breach by the system operator.

Paragraph (d)

35. In relation to paragraph (d), although this paragraph refers to “any law”, the Commission does not consider that this can include a breach of the rules. Such an interpretation would turn the UTS provisions into an alternative scheme to deal with any rule breach. The Commission does not consider that this is what is intended by the UTS provisions.

Paragraph (e)

36. Paragraph (e) of regulation 55(2) only applies if the relevant circumstances are:
- exceptional or unforeseen; and
 - at variance with, or threaten or may threaten:
 - generally accepted principles of trading; or
 - the public interest.
37. An inadvertent failure to correctly model a re-rating constraint in SPD is unlikely to meet the threshold of being an “exceptional or unforeseen circumstance” and accordingly paragraph (e) does not apply.
38. However, even if an inadvertent failure to model the removal of a constraint could be considered an exceptional or unforeseen circumstance, the Commission thinks that it is unlikely that it can be considered to be at variance with, or threatening to, generally accepted principles of trading or the public interest.
39. Although “generally accepted principles of trading” are not defined, the Commission, considers it unlikely that a mistake by a service provider breaches any principles of trading that would be regarded as “generally accepted”. There has not, in the Commission’s view, been a departure from any principles of trading. There simply appears to have been an error that constitutes a straightforward (and admitted) breach of the rules.
40. The Commission notes that the rules and regulations contemplate that pricing can occur on the basis of incorrect information by providing that, in such circumstances, final prices are not to be republished even if an undesirable trading situation exists (rule 3.27 of section V of part G) and no compensation may be ordered to be paid under the regulations in respect of a breach related to inputs to, or the process of determining, final prices, or if the compensation sought would be determined by reference to recalculated final prices (regulation 116).
41. Turning to whether the circumstances are at variance with “the public interest”, the Commission does not consider that it is sustainable to argue that final pricing based on erroneous input information should automatically be considered as being at variance with the public interest.
42. If this argument were accepted, then by implication rule 3.27 and regulation 116 would also be at variance with, or threatening to, the public interest. Both those provisions expressly contemplate final pricing based on erroneous information. The Commission

notes that it is open to the Commission to review rules and regulations and recommend amendments if it considers alternatives would better serve the public interest. However, in applying the rules and regulations the Commission considers that it must assume as a given that their operation is consistent with the public interest.

43. In summary, the Commission does not consider that paragraph (e) applies in this case.
44. Accordingly, the Commission turns to consider whether the test in regulation 55(1) has been satisfied. The Commission has considered each limb of regulation 55(1) below.

Limb 1 - regulation 55(1)(a)

45. The Commission is required to consider whether the circumstances giving rise to the UTS claim threaten, or may threaten, trading on the wholesale market for electricity.
46. 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.
47. Market participants are aware that pricing relies on information being provided, and correctly inputted into SPD. A failure such as the one in this case is expressly contemplated by the rules and regulations (rule 3.27 and regulation 116 respectively), and therefore, in the Commission’s view, is unlikely to meet the threshold of threatening trading on the wholesale market for electricity.
48. In addition, the financial impact of the circumstance giving rise to the UTS claim is not so significant that it could realistically be regarded as likely to threaten trading (in the order of 0.05% of total purchases in the relevant month²). The Commission does not consider that a market impact of this magnitude can generally be considered to threaten trading on the wholesale market for electricity. The market (and Genesis, the market participant that bore the brunt of the financial impact) has continued to trade and settle after the circumstances giving rise to the UTS claim occurred.
49. In summary, the Commission considers that the criteria set out in regulation 55(1)(a) are unlikely to be met in relation to the UTS claim by Genesis.

Limb 2- regulation 55(1)(b)

50. The Commission also does not consider that the criterion in regulation 55(1)(b) is met and notes that the rules and regulations set out a regime for addressing rule breaches. This regime includes a prohibition on republishing final prices, even if those final prices are based on information or a process that contains an error, or an undesirable trading situation exists (rule 3.27 of section V of part G), and a prohibition on the Rulings Panel ordering compensation in respect of a breach of the rules if the breach is related to, or connected

² Note this report has been corrected. Previously this was incorrectly described as the “relevant day”.

with, the inputs to, or the process of determining, final prices or if compensation would be calculated by reference to recalculated final prices (regulation 116).

51. The UTS claim by Genesis, which arose from an admitted breach by the system operator, relates to an error in the inputs to final prices. Final prices have already been published.
52. The Commission does have limited power to delay final prices but, in this case, that power was not able to be exercised. Also, in the circumstances of this case the Commission considers the rule breach process, does provide a satisfactory mechanism to resolve the relevant situation, in terms of regulation 55(1)(b).
53. The Commission notes that the appropriate way for the Commission to address any perceived unfairness in the operation of the prohibition on republishing final prices/compensation based on recalculated final prices is to recommend an amendment to the rules and the regulations.

Comments on the interpretation of regulation 55(1)(b) generally

54. In regulation 55(1)(b), the reference to a contingency or event that “cannot satisfactorily be resolved by any other mechanism available under the rules” is not, in the Commission’s opinion, intended to give the Commission a general discretion to depart from the remedies available for rule breaches simply because market participants do not consider that the rules are satisfactory in some respect. Rather, the opinion that the Commission is required to form for regulation 55(1)(b) to be satisfied is that the rules do not fully address the particular contingency or event before the Commission.
55. For example, an error by the system operator in inputting information into SPD will generally be simply a rule breach that is generally able to be resolved under the rule breach mechanisms.
56. In contrast, for example, inputting erroneous information into SPD where the inputting forms part of an arrangement between personnel of the system operator and personnel of other market participants directed at manipulating prices goes beyond what the relevant rules breach mechanisms are directed at. Accordingly the Commission considers that it is open to it to find that regulation 55(1)(b) is satisfied in such a case because there is nothing in the rules to address the arrangement that underlies the inputting error.
57. In addition, it could be that a simple rule breach could be of such extraordinary magnitude (for example, such financial magnitude that otherwise solvent participants in the market would become insolvent and unable to trade) that the Commission is able to come to the view that the rule breach mechanisms do not contemplate breaches that have an impact of such magnitude, and accordingly the requirements of regulation 55(1)(b) may be satisfied. The magnitude of the impact in this case does not reach that threshold.

Can a situation involving a rule breach also be a UTS?

58. The situation giving rise to the UTS claim in this case is an admitted breach of the rules by the system operator.

59. The Commission considers a simple rule breach will, ordinarily, not also constitute an undesirable trading situation. In the majority of circumstances such a breach must be dealt with under the rule breach procedures set out in the regulations and not under the UTS provisions.
60. The view expressed above should not be taken as meaning that, if conduct involves a rule breach, it cannot constitute an undesirable trading situation. That is not the Commission's view.
61. However, conduct that constitutes a rule breach must have an extra element to it (such as an attempt at market manipulation, or an impact of such financial magnitude that otherwise solvent participants in the market would become insolvent and unable to trade), to bring it under the undesirable trading situation provisions in the regulations.
62. If this were not the case, the undesirable trading situation provisions would operate as an alternative rule breach regime which would cut across the specific and detailed rule breach regime set out and supported by Parts 4 to 8 of the regulations. The Commission does not consider that this outcome was intended.

Discussion of Regulation 56(2)(c)

63. Having found that no undesirable trading situation exists, the Commission is not required to consider the remedies available to it under Regulation 56(2) in respect of the UTS Claim by Genesis. However, the Commission considers it appropriate to make some comments in regard to regulation 55(2)(c) which gives the Commission the power, once an undesirable trading situation has been found to exist under regulation 55, to direct that any trades be closed out or settled at a specified price. This was the remedy sought by Genesis in their UTS claim.
64. The Commission to date has not been required to consider what regulation 56(2)(c) means in practice. On its face, regulation 56(2)(c) appears to give the Commission the power to direct that individual trades be settled amongst participants at a price which differs from published final prices. In effect, under this interpretation of regulation 55(2)(c), the Commission arguably has the power to order the recalculation of final prices in respect of trades where an undesirable trading situation has been found to exist.
65. The Commission notes that such an interpretation appears to be inconsistent with rule 3.27 of part V of section G, which provides that final prices are not to be republished even if an undesirable trading situation exists and regulation 116 which prohibits the Rulings Panel from ordering compensation in respect of a breach of the rules related to inputs to, or the process of determining, final prices.
66. As noted in its conclusion section below, the Commission considers that there is a requirement for the Commission to consider further how the UTS provisions, in this case the powers available to the Commission to correct the effects of an undesirable trading situation, fit with other aspects of the regulations and rules.

Conclusion

67. By a majority of its members, the decision of the Commission is that the circumstances giving rise to the UTS claim by Genesis do not constitute an undesirable trading situation.
68. The Commission notes that the admitted breach by the system operator giving rise to the circumstances underlying the UTS claim is currently being considered in the ordinary process of analysing breaches of the rules.
69. In reaching its decision, the Commission has reflected on the relationship between some of the Commission's functions, in particular the relationship between the UTS provisions, rule breach function, and the general market pricing and operation rules. The Commission considers that it is highly desirable that these different functions operate in a clear and consistent way but notes that events, such as the Genesis claim of an undesirable trading situation, highlight the fact that the way these functions impact on one another in practice needs further consideration, clarification and development.
70. The Commission notes that aspects of these different functions are the subject of ongoing development. For instance, the Commission recently released a consultation paper to address concerns regarding high spring washer effects in the SPD model. However, the Commission intends to review the development proposals underway and to address interrelationships in an integrated way.

Electricity Commission
Wellington
30 August 2006
UTS Decision 5, 2006

Minority decision by Commissioner David Close

1. In my opinion, this is a straightforward case in that the facts are not disputed, namely, that the System Operator committed a simple modelling error, that this error resulted in exorbitant prices at certain nodes, that the complainant suffered a significant financial loss, and that the only sure means of redressing the loss is by the Commission exercising its powers to order that trades be settled at a specific price under regulation 56(2)(c).
2. At \$1500 to \$2000/Wh, prices at some nodes were approximately 20 times higher than in the periods preceding or following trading period 35. Genesis suffered a loss of approximately \$137,000 in the half hour period.
3. However, the case is less straightforward when it comes to deciding whether the event complained of constitutes an undesirable trading situation as set out in regulation 55. I consider that the Commission should not take a restrictive view of what constitutes an undesirable trading situation. In particular, I do not consider that, for a rule breach also to constitute an undesirable trading situation, it must have an extra element to it, such as an attempt at market manipulation or another undesirable practice.
4. In reaching this view I do not consider that the examples of undesirable trading situations set out in regulation 55(2)(a) to (d), should be relied upon. These examples refer to such things as manipulation and deception, but the opening words of regulation 55(2) make it clear that it does not limit regulation 55(1). In other words, the examples of manipulation and deception are not intended to restrict what constitutes an undesirable trading situation.
5. Moreover, the final example of an undesirable trading situation given under 55(2)(e) refers to "***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.***" (emphasis added) It seems to me that prices based on inputs known to be in error are at variance with generally accepted principles of trading.
6. The Commission adopted this view in its decision on the Bay of Plenty undesirable trading situation that occurred on 24 April 2004: "*requiring market participants to accept the adverse consequences of manifest errors is not, subject to the value placed on the certainty of final prices reflected in Rule 3.27 of Part G Section V, in the interests of the maintenance of trading in an orderly and proper manner.*"
7. In the Bay of Plenty case, final prices had not been published; in the current case, final prices have been published and the Commission has decided that the principle of maintaining the certainty of final prices should be upheld.
8. In my view, for the reasons set out above, the UTS claim was justified, and the correction of a manifest error should have precedence over the principle of maintaining the certainty of final prices.

David Close

30 August 2006