

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

**AND**

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

**DECISION OF THE ELECTRICITY GOVERNANCE BOARD PURSUANT TO  
PART 3 OF THE ELECTRICITY GOVERNANCE REGULATIONS 2003  
REGARDING AN ALLEGED UNDESIRABLE TRADING SITUATION  
ON SATURDAY, 21 AUGUST 2004**

**DECISION DATED 21 DECEMBER 2004**

**IN THE MATTER of the Electricity Act 1992****AND****IN THE MATTER of the Electricity  
Governance Regulations 2003****Decision of the Electricity Governance Board pursuant to  
Part 3 of the Electricity Governance Regulations 2003  
regarding an alleged undesirable trading situation  
on Saturday 21, August 2004****General Context of this Decision**

1. Under Part 3 of the Electricity Governance Regulations 2003 (“the Regulations”) the Electricity Commission Board is given powers to investigate and take action in respect of undesirable trading situations (“UTSs”). This decision concerns a claim that a UTS may have occurred on Saturday, 21 August 2004.
2. In this decision, consistent with practice to date, the Electricity Commission Board will refer to itself as “the Commission”.
3. This decision has been made by a committee of the Commission, comprising all of the members of the Commission (“the Committee”), to which decision making regarding UTSs has been delegated in the interests of operational efficiency. Except where expressly provided otherwise, references in this decision to the Commission include references to the Committee acting as delegate on behalf of the Commission.

**Background**

4. On the morning of Sunday, 22 August, M-co, as Pricing Manager, gave notice of a provisional pricing situation affecting trading period 22 (10:30 – 11:00) on the previous day, Saturday, 21 August. M-co accordingly published provisional prices for the trading periods on 21 August, including the prices for trading periods 20 to 24 inclusive. These prices are set out in the graph and table attached to this decision as schedule A.
5. The provisional prices for trading period 22 would, if confirmed as final prices, constitute unusually high (for example \$12,356/MWH at Wellington Central Park) and low (for example -\$1,317 at Tokaanu) final prices.

6. On Monday, 23 August, with prices for Saturday, 21 August still being provisional, Genesis Power Limited (Genesis Energy) requested the Commission to:
- Order the delay of publication of final prices for trading period 22 on 21 August under Rule 3.28 of Section V Part G of the Electricity Governance Rules 2003 (“the EGR’s”); and
  - Review the events of 21 August to determine whether a UTS existed in trading period 22 under Regulation 55(2)(e), namely “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”.
7. The Commission considered the issues raised by Genesis Energy on Tuesday, 24 August. As announced to the market that day, the Commission:
- Declined to delay the publication of final prices and final reserve prices for trading period 22; and
  - Concluded that the circumstances involved did not satisfy the test for a UTS under the EGR’s.

### **Meridian Claimed UTS**

8. Subsequent to the Commission’s consideration of the Genesis Energy claimed UTS on 24 August, the Commission became aware that Meridian Energy Limited (Meridian Energy) had also alleged a UTS exists, arising from the same circumstances as the Genesis Energy claimed UTS, and had emailed this claim to the Commission on Monday 23 August. Upon investigation, the Commission became aware that this email had been blocked by the firewall on the Commissions computer system without a notification of this action being sent either to the Commission or Meridian Energy.
9. Telephone communications between Meridian Energy and surveillance and compliance on 23 and 24 August also did not clarify that Meridian Energy was alleging a UTS claim distinct from that made by Genesis Energy.
10. As a result of its investigation into the above matters, the Commission notified market participants, on 24 September, of an amended procedure to prevent a similar future failure of communication and invited Meridian Energy to indicate whether or not it

wished to pursue its UTS claim. Meridian Energy has now indicated that it does not wish to pursue that claim. Accordingly, this decision deals solely with the UTS claim made by Genesis Energy.

### **Commission's Decision**

11. This is the Commission's full decision in regard to the Genesis Energy claimed UTS.

### **Trading period 22 and the issues raised by Genesis Energy**

12. On Sunday, 22 August M-co, as Pricing Manager, declared that a provisional price situation existed for trading period 22 on Saturday, 21 August, and subsequently published provisional prices for that day.

13. The EGR's set out three circumstances in which the Pricing Manager may declare a provisional price situation. These are where:

- (a) an infeasibility situation (Part G, Section V, rule 3.6); or
- (b) a SCADA situation (Part G, Section V, rule 3.5); or
- (c) a metering situation (Part G, Section V, rule 3.6),

exists.

14. Although the information recorded by the Pricing Manager did not disclose an infeasibility, SCADA or metering situation, the Pricing Manager did discover very large (over \$10,000) and very low (under negative \$1,300) prices for trading period 22 at a number of central North Island and lower North Island nodes. As such prices are sometimes symptomatic of infeasibility situations, the Commission has been informed that the Pricing Manager decided to declare a provisional pricing situation based on the possibility that an infeasible situation had occurred.

15. On Monday, 23 August, when Genesis Energy requested the Commission to order the delay of publication of final prices, and to review events relating to trading period 22, on 21 August, it specifically asked the Commission to consider "if there are any circumstances causing these unusual prices either as a result of the (Scheduling Pricing and Dispatch ("SPD")) model, or inputs into the model that may be undesirable".

16. In an email to the Commission later that same day (Monday, 23 August), Genesis Energy confirmed their primary concern as being with ensuring, given the unusual pricing outcomes, that the model and model inputs had been robustly checked. Their concern was not so much with the price levels in and of themselves, even though Genesis Energy would be financially disadvantaged by those prices if they were declared final at the provisional level.
17. Based on information provided by Transpower as System Operator, the Commission was informed that the following circumstances, as reflected in inputs into SPD, influenced outcomes on 21 August, and for trading period 22 in particular:
- For the period from 9:00 to 16:00 on 21 August the grid configuration of the lower North Island power system was unusual, in that supply into the lower North Island was restricted to that available only over the three “Desert Road” 220 kV circuits through the central North Island.
  - As a consequence of a severe storm earlier in the week, both 220 kV circuits to Taranaki from Bunnythorpe were out of service due to a tower failure. In addition, the HVDC Bipole was shut down for urgent insulator cleaning at the North Island HVDC cable terminal.
  - The remaining lower North Island 110 kV grid had been reconfigured to maximise the available transfer on the three in service 220 kV “Desert Road” circuits during the HVDC outage, given that the expected lower-North Island demand would be close to the available transmission capacity.
  - Constraints for the period of the HVDC Bipole outage were in place to manage the loading on these three remaining circuits and to ensure the available capacity would satisfy the requirements of the System Operator’s Policy Statement. In the absence of the HVDC Bipole, North Island generation was required to fully meet North Island demand.
  - At 10:30 it was identified that a temporary constraint was required to keep grid assets within capability for a planned outage underway in part of the switchyard at Arapuni power station. This constraint was required due to generation at Arapuni running at near maximum output and the unusual grid configuration in

the lower North Island. A temporary constraint was applied to the Arapuni-Hangatiki circuit for the period from 10:30 to 15:00.

18. The Commission considered whether there was any indication that SPD had not operated as intended, or on the basis of erroneous inputs, during the relevant period. Based on its review of written material provided by Transpower, and additional information provided by Transpower in response to oral questions from Commission members, the Commission concluded that there was no indication that SPD had not worked consistently with its design and to its specifications. The Commission also notes that it did not receive any indication of SPD input errors.
19. The Commission also noted that the system operator continued to dispatch the Tokaanu power station as there was no evidence of the constraint effects in Real Time Dispatch (RTD). This was due to the allocation of the assumed demand across the North Island. Actual metered demand used in final pricing was lower in the upper North Island than that assumed in dispatch process. Despite the existence of negative final prices at the Tokaanu node, as a consequence of the station being constrained up to the minimum required for providing frequency keeping services, the compensation paid to Genesis Energy under the EGRs for the service offsets the negative energy price payment incurred.

### **The UTS Regime**

20. In its decision on the Tauranga UTS of 24 April 2004, the Commission considered issues relating to the operation of SPD in the context of “unusual” pricing outcomes. In that decision, the Commission made the following comments which the Commission considers are also relevant to the application of the UTS regime in these circumstances:
  - “44. The Commission notes that regulation 55 contemplates particular outcomes on trading. The concepts used are “threats to trading that preclude its orderly maintenance”, and “circumstances that are at variance with or threaten generally accepted principles of trading or the public interest”.
  45. The Commission considers, therefore, that the Part 3 UTS regime is not directed at the process where, in general terms, improvements may be made to Rules over time. The Commission notes, in this context, its role pursuant

to section 172 O(1)(a) of the Act in formulating and making recommendations to that end.

46. Rather, the Commission considers that the Part 3 UTS regime provides the Commission with a way of responding to unexpected events that have or may have significant adverse effects for trading. The Commission sees this role as being more part of its function under section 172 O(1)(b) of the Act. It notes that such effects are to be assessed in light of the importance of the maintenance of orderly trading, and the observance of generally accepted principles of trading, for the operation of the wholesale market, as the wholesale market in turn contributes to the overall objectives of the construct of the electricity industry in New Zealand created by the Act, the Regulations and the Rules.”

21. The issue for the Committee therefore, in considering whether a UTS exists, is to determine whether the relevant circumstances threaten trading, preclude orderly trading and the proper settlement of trades and/or are at variance with or threaten generally accepted principles of trading or the public interest.
22. Given:
- Genesis Energy’s confirmation that its concern was not so much with the unusual price outcomes in and of themselves, but to ensure those outcomes were based on appropriate input data and the normal operation of SPD; and
  - There was no indication that the prices for trading period 22 would in and of themselves meet the thresholds of Regulation 55 and thereby constitute a UTS; and
  - The outcome of the Commission’s review of circumstances relating to trading period 22 on 21 August and, in particular, the inputs into and the operation of, SPD on that day as recorded in this decision,

the Committee (by majority decision) considered that the circumstances in question did not constitute a UTS, and accordingly declined to order a delay in the publication of final prices.

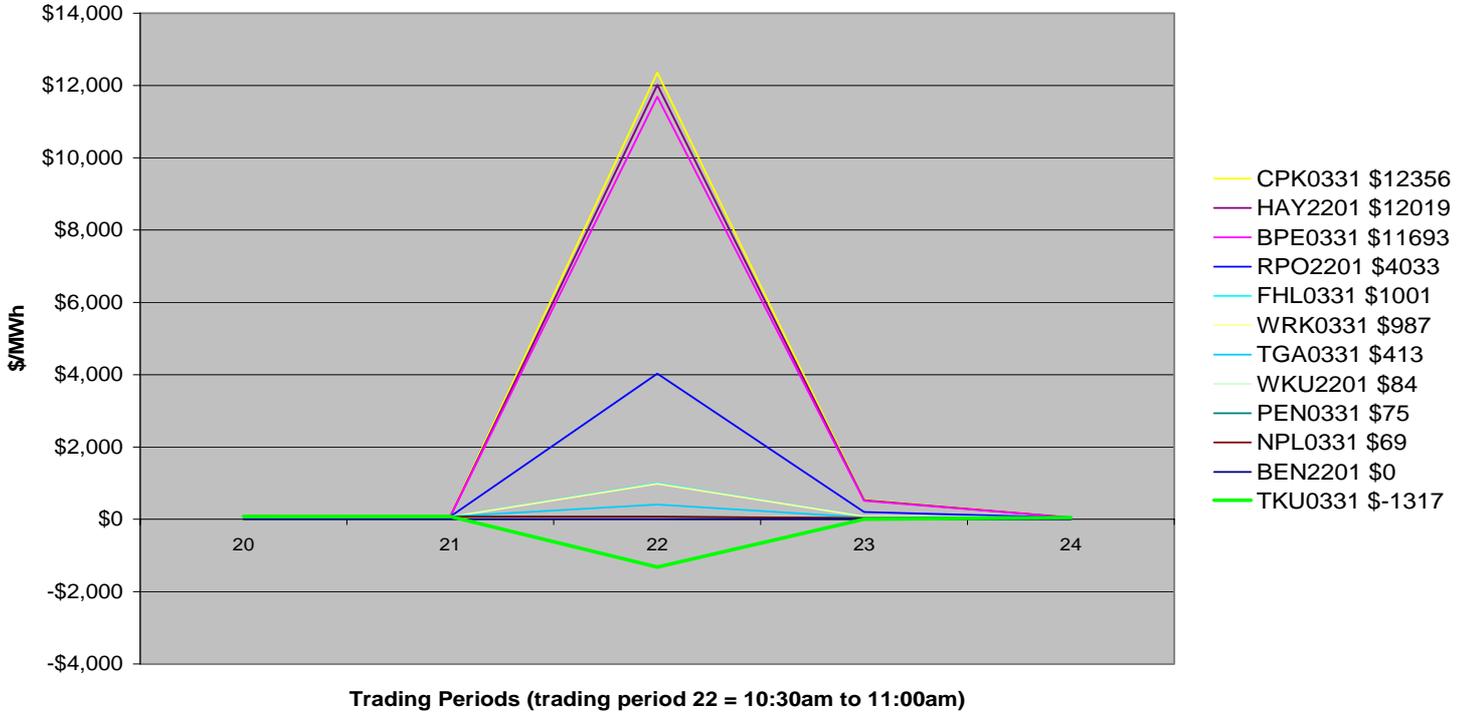
23. Commissioner Close dissented from this decision. His view was that the magnitude of the price variations (ranging in the order of 200 times greater to 20 times less than the previous half hour) and the wide distribution of the variations (which affected many major and minor North Island nodes) were such that they threatened or might threaten "generally accepted principles of trading or the public interest" (in regard to Regulation 55(2)(e)). In these circumstances, he considered that it was appropriate to delay the publication of final prices and final reserve prices for trading period 22 and to accept the offer of the System Operator to carry out further investigation
24. As the Commission has done on previous occasions when considering whether specific pricing outcomes produced by SPD might constitute a UTS, the Commission acknowledges that the pricing outcomes for trading period 22 on 21 August may raise issues with respect to the design and operation of SPD, particularly as regards the modelling of constraints. As already announced, it considers that the constraint issues are best considered as a part of the Constraints Issues Group work established by the Commission following the Commission's decision on the Tauranga UTS of 24 April 2004.

**The Electricity Commission  
Wellington  
21 December 2004  
UTS Decision 3, 2004**

**Schedule A**

**Summary of provisional prices for trading period 22**

Please note that the prices in the legend have been rounded to the nearest dollar



GXP/GIP	Trading Period				
	20	21	22	23	24
BEN2201	\$0	\$0	\$0	\$0	\$0
BPE0331	\$86	\$84	\$11,693	\$512	\$48
CPK0331	\$91	\$88	\$12,356	\$541	\$51
FHL0331	\$76	\$74	\$1,001	\$79	\$46
HAY2201	\$88	\$86	\$12,019	\$526	\$50
NPL0331	\$71	\$69	\$69	\$36	\$36
PEN0331	\$77	\$75	\$75	\$40	\$40
RPO2201	\$78	\$75	\$4,033	\$201	\$46
TGA0331	\$78	\$75	\$413	\$51	\$56