# VECTOR GAS LIMITED AS CRITICAL CONTINGENCY OPERATOR

Notifying participant

# GENESIS POWER LIMITED TRADING AS GENESIS ENERGY

Participant allegedly in breach

NOVA GAS LIMITED
THE AUCKLAND GAS COMPANY LIMITED
BAY OF PLENTY ENERGY LIMITED
MAUI DEVELOPMENT LIMITED

Parties to breach notice

Record of settlement of alleged breach of regulation 55(1) of the Gas Governance (Critical Contingency Management) Regulations 2008

### RECORD OF SETTLEMENT OF ALLEGED BREACH OF REGULATION 55(1) OF THE GAS GOVERNANCE (CRITICAL CONTINGENCY MANAGEMENT) REGULATIONS 2008

Breach Notice: 2011-360

Between:

Notifying participant:
Participant allegedly in breach:

Parties to alleged breach:

Vector Gas Limited as Critical Contingency Operator Genesis Power Limited trading as Genesis Energy Nova Gas Limited, The Auckland Gas Company

Limited, Bay of Plenty Energy Limited, Maui

**Development Limited** 

### **Background**

Pursuant to regulations 18(3) and 23 of the Gas Governance (Compliance)
Regulations 2008, the Market Administrator referred an alleged breach of
regulation 55(1) of the Gas Governance (Critical Contingency Management)
Regulations 2008 ("the Regulations") by Genesis Power Limited trading as
Genesis Energy ("Genesis Energy") to an investigator, Jason McHerron, for
investigation.

### 2. Regulation 55(1) provides:

## 55 Retailers and large consumers must follow directions

- (1) Retailers and large consumers must, as soon as is reasonably practicable, comply with the directions of a transmission system owner given under these regulations during a critical contingency.
- 3. The alleged breach relates to the Maui Pipeline Outage critical contingency in October 2011, during which the Critical Contingency Operator ("CCO") exercised powers under the Regulations to require the curtailment of demand for gas.
- 4. During the critical contingency, the CCO required industrial and commercial gas consumers to stop using gas on the affected parts of the transmission system. As a large commercial gas consumer, the Huntly Power Station, which is operated by Genesis Energy, was subject to such a restriction, as were other gas-fired power stations.
- 5. Maui Development Limited ("MDL") is the transmission system owner ("TSO") of the Maui pipeline. Under reg 54, each TSO must comply with the directions of the CCO given under the Regulations and issue directions to retailers and large consumers in accordance with the Regulations and in a manner consistent with the relevant critical contingency management plan ("CCMP") and the communications plan.

- 6. At 03:03 on 25 October 2011, MDL published notice #11225, notice of direction to curtail demand, on OATIS.<sup>1</sup> This notice directed (inter alia) that the Huntly Power Station was to curtail all demand by 03:30 that morning.
- 7. Also at 03:03 on 25 October 2011, Vector Gas (acting as TSO on behalf of MDL) sent an automatic email to a number of parties, including to Genesis Energy at the email address: <a href="mailto:fuel.notification@genesisenergy.co.nz">fuel.notification@genesisenergy.co.nz</a>. Genesis Energy has confirmed that emails sent to that email address were received by the five members of Genesis Energy's Fuels Team. The subject line of the email stated:

OATIS (Maui). New Critical notice ID 11225 "Notice of Direction to Curtail Demand" - Action Required

The body of the email stated:

A new Critical notice has been published on the Maui IX.

Notice of Direction to Curtail Demand

Please visit the Maui IX at <a href="https://www.oatis.co.nz">https://www.oatis.co.nz</a> for further information.

25/10/2011 3:03:35 a.m.

8. At the same time, Vector Gas (on behalf of MDL as TSO) also sent an automatic SMS alert to the cell phones of members of Genesis Energy's Fuels Team. The SMS stated:

A new Critical notice ID 11225 "Notice of Direction to Curtail Demand" has been published on OATIS (Maui). Please visit the Maui IX at <a href="https://www.oatis.co.nz">www.oatis.co.nz</a> for furt,

- 9. Access was freely available to MDL's notices on OATIS, which members of Genesis Energy's Fuels Team knew how to use. However, no one from Genesis Energy's Fuels Team was monitoring communications from MDL or the CCO relating to the critical contingency at the time when the direction to implement demand curtailment was sent. Not only did the individuals at Genesis Energy who were actually involved in complying with the demand curtailment direction not receive the direction (it was not forwarded to them by the Fuels Team), they were not adequately trained to access the notices on OATIS themselves.
- 10. Because the Fuels Team was not monitoring the relevant notices, the first that anyone at Genesis Energy was aware that full curtailment was required by 03:30, appears to have been at 03:10, when a Genesis trader spoke with the CCO by telephone. The trader made it clear to the CCO that she would need to see the actual curtailment notice before she could implement the curtailment direction.
- 11. The Genesis trader received a copy of the CCO's curtailment notice at 03:19, forwarded by Transpower. The trader then had a number of discussions with colleagues to brief them on the situation and obtain their advice, following which

<sup>&</sup>lt;sup>1</sup> OATIS is the critical contingency Internet site for the purposes of reg 9 of the Regulations.

- a staged curtailment of gas usage by the Huntly Power Station generating units was implemented.
- 12. Genesis Energy states that it was using zero gas by 04:42 and that it had used 1,890 GJ after 03:30, the time when curtailment took effect. It had used 2,313 GJ since it had received a copy of the curtailment notice from Transpower at 03:19.
- 13. However, Genesis Energy made further attempts to start one of its generating units between 05:00 and 08:30 on 25 October 2011, while demand curtailment was still in place, using a combination of natural gas and fuel oil, with a view to switching it to coal as soon as possible. These attempts failed when bursting discs on the LP turbine lifted and needed to be reset. In the start-up attempt, a further 500 GJ of natural gas were used (about 0.19% of Genesis Energy's daily gas consumption).
- 14. Genesis Energy's consumption of gas at the Huntly Power Station during the initial stages of the critical contingency is represented in a graph prepared by Genesis Energy at **APPENDIX 1.**
- 15. If someone from the Fuels Team had been proactively monitoring the notices as they were published on OATIS, then it is likely that relevant decision-making could have occurred earlier, leading to less gas being used after the curtailment direction deadline of 03:30.
- 16. In addition, some of the telephone conversations, for example at 03:01 and 03:05, suggest that Genesis Energy staff may have been unaware that a curtailment direction would be likely to require Genesis Energy to cease using gas even if the gas pressure had not reduced. Greater involvement by the Fuels Team at this crucial time would have ensured that staff clearly understood the implications of such a direction that it required gas usage to cease even if pressure remained adequate (as was the case).
- 17. Genesis Energy acknowledges that there are several areas in which its response to the requirement to curtail demand could have been improved. The second attempt to start one of the units at 05:00 on 25 October 2011 using natural gas seems to have been initiated despite clear knowledge that all gas usage by Huntly Power Station was prohibited, albeit with the intention to ensure security of supply of the electricity system. And Genesis Energy has itself acknowledged that it is capable of making improvements to its processes to ensure that in future it can comply with demand curtailment directions more promptly.
- During the critical contingency, Genesis Energy was extremely concerned about its ability to meet its obligations under the Electricity Code and ensure security of electricity supply. Subsequently, Genesis Energy has acknowledged that a gas curtailment notice overrides concerns or pressures regarding security of electricity supply.
- 19. It is important to note that, during a critical contingency, the CCO will communicate by telephone with the Electricity System Operator prior to giving directions to curtail or restore thermal power

generation by large consumers in the 1a and 1b curtailment bands. The aim of this communication is to discuss and agree the most effective way to curtail the required quantity of gas from the system in a way that minimises the impact on the electricity system.<sup>2</sup> Following the CCO's Performance Report on the October 2011 critical contingency the CCO has proposed an amendment to its Information Guide to enhance such collaboration.

## Effects on other parties

- 20. The Auckland Gas Company Limited, Bay of Plenty Energy Limited, Nova Gas Limited and Maui Development Limited all joined the breach notice as parties. None of them identified any effects on them caused by the alleged breach.
- 21. The CCO advised me that Genesis Energy's conduct, in particular its use of gas beyond 03:30 on 25 October 2011, did not cause any difficulties in managing the critical contingency. However, had Vector's 200 line not been able to be utilised to continue to supply gas during the critical contingency then Genesis's failure to curtail by 03:30 on 25 October 2011 could have had a far more significant effect on gas supply.

# Steps by Genesis Energy to prevent reoccurrence in the event of a future contingency

- 22. Following the critical contingency in October 2011 Genesis Energy undertook a post-incident review and realised there were areas of its processes that could be improved, including around communication. Genesis Energy has put the following steps in place to improve its response to any future contingency event:
  - 22.1. A new email address <a href="mailto:gascontingency@genesisenergy.co.nz">gascontingency@genesisenergy.co.nz</a> has been provided as a contact to the CCO for future notices in a critical contingency. This email address will be monitored 24/7 by the Trading Desk, which means that Trading will now be notified directly of a contingency instead of being advised by the Fuels Team or Centre Desk. The trader on duty will distribute instructions to the appropriate staff for action as soon as such notices are received. Genesis Energy's Fuel Gas Management Instruction has been updated to refer to this new email address and the CCO advises that it has added the new email address to its email distribution lists.
  - 22.2. Genesis Energy has put in place further training and education for Operations and Trading staff in relation to the required responses under the various phases of the CCMP during a critical contingency, including training staff on the Trading Desk, and staff in the Operations and Fuels Teams, on the use of OATIS to access CCO notices.
  - 22.3. Lines of accountability and responsibility have been further defined with respect to a critical contingency including in a new document for the

<sup>&</sup>lt;sup>2</sup> Critical Contingency Operator Information Guide, Document No.CCO-006, V2.0 14 June 2011, p 10.

Trading Team entitled "Gas Contingency Process". This document provides information on how to access notices on OATIS and explains that the Regulations require Genesis Energy to comply with instructions given by the CCO.

- 22.4. Genesis Energy staff are now aware that a gas curtailment notice overrides concerns or pressures regarding security of electricity supply.
- 22.5. More staff have been trained to operate the Synthetic Natural Gas plant at Huntly Power Station (SNG is used to start off oil, as an alternative support energy for coal to run generating Units 1-4).

### The agreed settlement

- 23. Genesis Energy admits that it breached reg 55(1) of the Regulations on 25 October 2011 in respect of its failure to:
  - 23.1. initially respond in accordance with directions given on behalf of MDL at 03:03 on 25 October 2011, as soon as reasonably practicable after those directions were given; and
  - 23.2. comply with the directions to curtail demand for gas, in its use of gas between 05:00 and 08:30 on 25 October 2011 to convert one of its dual fuel generating units from gas to coal.
- 24. Genesis Energy acknowledges that the above breaches were a result of internal communication and training failures, and that Genesis Energy was pursuing the objective of maintaining security of supply of the electricity system. Genesis Energy further acknowledges that this objective was not a permitted exception to complying with the Regulations.
- 25. Genesis Energy agrees to:
  - 25.1. continue to implement the steps outlined in paragraph 22 above;
  - 25.2. provide the CCO, within one month of the date of approval of this settlement agreement by the Rulings Panel, with written confirmation to the CCO's reasonable satisfaction that Genesis Energy has implemented and continues to comply with the steps outlined in paragraph 22 above;
  - 25.3. cooperate with the CCO and consider any further reasonable recommendations the CCO may make (whether or not arising out of a test conducted under reg 34) to ensure that Genesis Energy complies with its obligations under the Regulations and this settlement agreement.
- 26. The CCO agrees to add the new email address <a href="mailto:gascontingency@genesisenergy.co.nz">gascontingency@genesisenergy.co.nz</a> to the CCO's distribution list for critical contingencies.

### 27. MDL agrees:

- 27.1. to undertake a process to review the level of detail contained in email directions given to large consumers pursuant to reg 55(1) (including demand curtailment directions);
- 27.2. in relation to any urgent notices given orally (including by telephone) under reg 23 (including demand curtailment directions), to use reasonable endeavours to convey all relevant information as quickly as possible.

### Acceptance of parties to settlement

- 28. The Critical Contingency Operator notified its acceptance of the terms of settlement in writing to the investigator on 9 August 2012.
- 29. Genesis Power Limited notified its acceptance of the terms of settlement in writing to the investigator on 8 August 2012.
- 30. Nova Gas Limited notified its acceptance of the terms of settlement in writing to the investigator on 9 August 2012.
- 31. The Auckland Gas Company Limited notified its acceptance of the terms of settlement in writing to the investigator on 9 August 2012.
- 32. Bay of Plenty Energy Limited notified its acceptance of the terms of settlement in writing to the investigator on 9 August 2012.
- 33. Maui Development Limited notified its acceptance of the terms of settlement in writing to the investigator on 8 August 2012.

## **Rulings Panel**

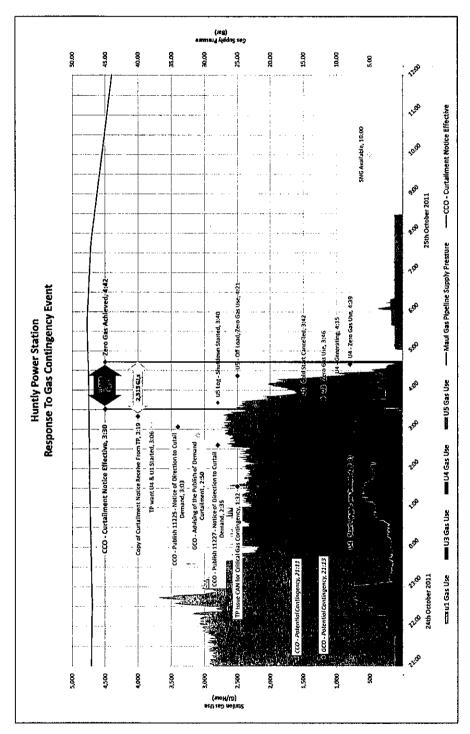
I approve this settlement pursuant to regulation 34 of the Gas Governance (Compliance) Regulations 2008.

Hon Sir John Hansen KNZM

1 NAcus

Date: 9 August 2012

# Appendix 1



2360563 v1