



Critical Contingency Operator

Critical Contingency Incident Report

Pohokura Production Station Unplanned Outage 13 July 2010

Date of Report : 20 July 2010

1. Introduction

This report has been prepared to comply with Regulation 64 of the Gas Governance (Critical Contingency Management) Regulations 2008. This requires the CCO to prepare and publish an incident report 5 business days after making a determination to terminate a Critical Contingency.

This report has been prepared in consultation with the Transmission System Owners (TSOs).

2. Cause Of Critical Contingency

At 14:20 on Tuesday 13 July 2010 an unplanned outage of the Pohokura Production Station occurred. MPOC curtailment processes took place but substantial negative Operational Imbalance at some of the MDL pipeline Welded Points resulted in a breach of the Critical Contingency threshold of 3 hours to 32 barg occurring at Rotowaro.

3. Duration Of Critical Contingency

A critical contingency was declared at 19:36 on 13 July 2010 and was terminated at 22:34 on 13 July 2010. The duration of the critical contingency was 2 hours and 58 minutes.

4. Log of Actions Taken by CCO and TSOs Immediately Before and During Critical Contingency

Note: The OATIS notices referred to can be found by looking up the reference numbers at www.oatis.co.nz. The CCO notices given are also included in appendix 7.2 of this report.

1. Potential Critical Contingency Stage	
Time	Action
14:27	Gas Control phoned CCO to inform of unplanned outage at Pohokura production station.
15:15	CCO discusses situation with Gas Control.
15:19	MDL issue notice #7991 on OATIS advising of low system linepack and that action may be necessary if not resolved.
15:55	MDL request balancing gas for the Intraday 4 nominations cycle.

16:10	MDL issue notice #7993 in OATIS advising shippers of MPOC s15.2 curtailment of Ngatimaru Rd (Receipt).
16:16	MDL issue notice #7994 in OATIS giving MPOC s15.1 Operational Flow Order (OFO) to Welded Parties due to Ngatimaru Road (Receipt) curtailment.
16:20	Vector issue notice #7995 in OATIS advising shippers that MDL had issued notice #7994 on MDL IX.
16:32	Vector issue notice #7996 in OATIS advising shippers that MDL has issued OFO notice #7994 for Welded Parties and that receipts should be matched with demand or Vector will be forced to issue an OFO if not rectified on Intraday 4 nomination cycle.
16:46	MDL issue notice #7997 in OATIS advising shippers of second MPOC s15.2 curtailment of Ngatimaru Rd (Receipt).
16:52	MDL issue notice #7998 in OATIS giving second MPOC s15.1 Operational Flow Order (OFO) to Welded Parties due to Ngatimaru Road (Receipt) curtailment.
17:16	Vector issue notice #7999 in OATIS advising shippers that Maui has issued second OFO notice #7998 for Welded Parties.
17:20	Gas Control inform CCO by email that situation has not improved and that a potential Critical Contingency notification should now be considered.
17:22	Pohokura PS advise Gas Control that production may start again in 30 minutes with full rates resumed by 20:30. Gas control relay this information to the CCO.
17:30	Colder than usual ambient temperatures are being experienced across the country and evening peak demand is commencing.
17:37	CCO discusses the situation with Transpower to make them aware that potential Critical Contingency conditions exist.
17:47	Vector curtail interruptible demands.
17:53	CCO publishes Potential Critical Contingency notice #8000 in OATIS and notifies by email and SMS. It is anticipated that system pressure and linepack losses will accelerate over the evening peak if Pohokura PS does not recommence flow as advised earlier or if demand does not drop to MCOP curtailed levels.
18:07	MDL issue notice #8001 in OATIS advising that the CCO has given notification of a potential Critical Contingency.
18:09	Vector issue notice #8002 in OATIS advising that the CCO has given notification of a potential Critical Contingency.
2. Declaration of Critical Contingency Stage	
Time	Action
19:00	CCO discusses situation with Gas Control. The Critical Contingency threshold of 3 hours to 32 barg at Rotowaro is being approached.

19:13	Gas Control send email to CCO notifying that Pohokura PS now expect that full rates will not be resumed until 22:00 at the earliest. High evening demand as expected due to the cold weather conditions. Interrogation of SCADA data at the Rotowaro Critical Contingency threshold point now confirms that the system has breached the threshold of 3 hour to 32 barg.
19:30	CCO determines that critical contingency conditions have occurred under r48(1)(a).
19:36	CCO publishes Critical Contingency Declaration notice #8004 in OATIS and notifies by email and SMS. The CCO advises that the critical contingency is not considered to be Regional.
19:44	MDL issue notice #8003 in OATIS advising shippers of third MPOC s15.2 curtailment of Ngatimaru Rd (Receipt).
19:53	MDL issue notice #8005 in OATIS giving third MPOC s15.1 Operational Flow Order (OFO) to Welded Parties due to Ngatimaru Road (Receipt) curtailment.
20:00	CCO develops general demand curtailment plan for reductions at all band 1b Large Consumers based on achieving a balance between current receipt levels of gas and off take rates from the system.
20:07	MDL issue notice #8009 in OATIS advising that ILON in notice #7990 has now expired due to the declaration of a Critical Contingency.
20:09	MDL issue Critical Contingency Declaration notice in OATIS #8006 .
20:10	Vector issue Critical Contingency Declaration notice in OATIS #8007 .
20:10	CCO phones Transpower to discuss power generation plans and associated gas usage plans at the thermal power generation plants at Southdown, Otahuhu, TCC, Huntly and Te Rapa. Information discussed is cross referenced with demand curtailment plans developed earlier by the CCO. Planned reduction in gas usage at the thermal power stations combined with expected general reduction of evening gas demand should not require any demand curtailment by the CCO if Pohokura PS resumes stable and sufficient injection as planned and system pressures/linepack recover sufficiently to meet morning peak demand.
20:14	Pohokura PS inform Gas Control that they now expect production to resume at 21:00 with full flow expected by 22:00.
20:18	CCO and TSO discuss situation further and jointly decide to await outcome of latest information received from Pohokura PS prior to taking any further actions.
20:21	MDL issue notice #8008 on OATIS giving important information about the Critical Contingency.
20:35	MDL issue notice #8010 in OATIS advising shippers of MPOC s15.2 curtailment of Tikorangi #2 (Receipt).
20:47	MDL issue notice #8011 in OATIS giving notice of MPOC s15.2 curtailment of Tikorangi #2 (Receipt) to Welded Parties.

3. Termination of Critical Contingency Stage	
Time	Action
20:50	Pohokura PS resumes flow and starts to increase rates.
20:50 - 22:10	System monitored by TSO and CCO for recovery rates and stability of flow from Pohokura PS.
22:10	CCO phones Transpower to inform them that Pohokura PS is now injecting again and that curtailment by the CCO is now unlikely and that it is expected that the Critical Contingency will be terminated shortly.
22:30	Pohokura PS injection rate is now stable and the flow rate is higher than that immediately prior to when the unplanned outage occurred.
22:32	CCO determines that the Critical Contingency can be terminated as the system has stabilised and pressures/linepack are recovering.
22:33	CCO receives email from Gas Control confirming that Pohokura PS flow is considered stable, is higher than pre-critical contingency levels, line pack is improving and that a substantial positive line balance now exists.
22:34	CCO publishes Critical Contingency Termination notice #8012 in OATIS and notifies by email and SMS.
22:46	Vector issues Critical Contingency Termination notice in OATIS #8014 .
22:47	MDL issues Critical Contingency Termination notice in OATIS #8013 .

5. Level Of General Compliance By Large Consumers And Retailers With TSO Directions

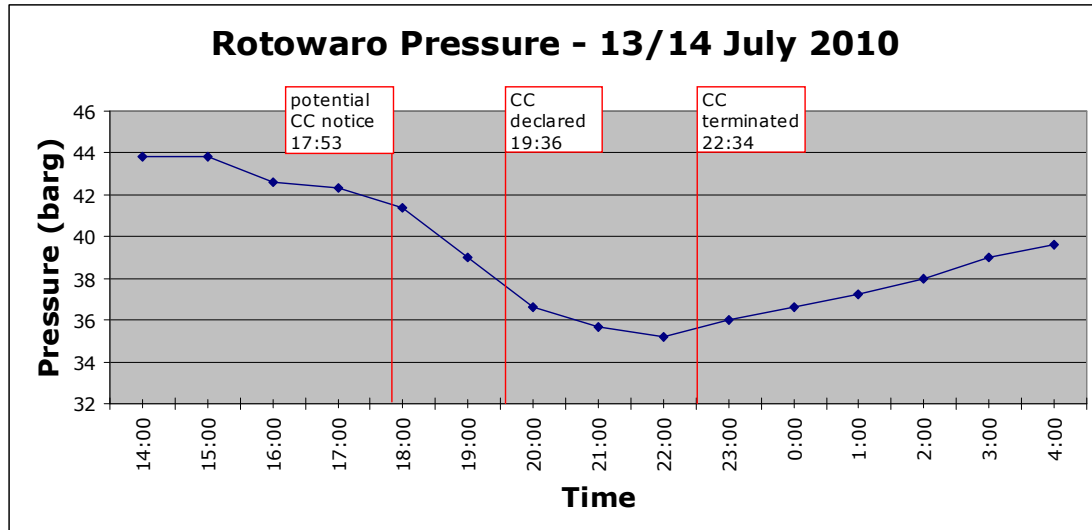
No directions were given by the TSO so assessment of compliance is not applicable.

6. Level Of General Compliance By Consumers With Retailers Directions

No directions were given by Retailers so assessment of compliance is not applicable.

7. Appendices

7.1 Rotowaro pressure profile



7.2 CCO Notices

Notification of Potential Critical Contingency

(OATIS notice #8000 published at 17:53)

The CCO has determined that a potential Critical Contingency situation exists.

1. Event causing potential critical contingency

Unplanned Pohokura outage and consequential falling linepack and pressure across the system

2. Areas of transmission system affected

All areas

3. Summary of actions being taken to resolve event

MDL and Vector are operating under the MPOC and VTC

Notes:

- (a) TSOs will continue to take action under the VTC/MPOC with the objective of regaining balance and preventing a Critical Contingency from occurring.
- (b) The potential Critical Contingency will be terminated when the CCO either issues a Notification of Termination of Potential Critical Contingency or when a Critical Contingency is declared upon which the potential Critical Contingency is automatically terminated.
- (c) The communication of this notice by email is recorded on the CCO computer system and the notice is considered received by this record. The date and time of this notice is that time stamped by the CCO computer system. It is not required to reply to or acknowledge this email notice.
- (d) This notice will be communicated by a truncated SMS message.
- (e) This notice will be published on the CCO internet site in the public domain. Refer to <https://www.oatis.co.nz>
- (f) The CCO will notify the TSOs by telephone of this notice.

Declaration of Critical Contingency

(OATIS notice #8004 published at 19:36)

This Notice is issued to inform you that the CCO has declared a critical contingency under **Regulation 49** of the Gas Governance (Critical Contingency Management) Regulations 2008.

1. Event causing Critical Contingency

Unplanned Pohokura Outage

2. Areas of transmission system affected

All Areas

3. Summary of actions being taken to resolve event

CCO curtailment decisions are under review and instructions should be expected shortly

4. Guidance on Critical Contingency being classed as Regional Critical Contingency

This event is not a Regional Critical Contingency.

Notes:

- (a) All directions issued by the CCO pursuant to the declaration of the critical contingency must be complied with.
- (b) Demand curtailment is not required at this stage and directions from the CCO will follow if required.
- (c) Any previous notice of a potential Critical Contingency by the CCO is now terminated.
- (d) The communications described in the CCO Communication Plan and TSOs CCMPs are now activated.
- (e) The communication of this notice by email is recorded on the CCO computer system and the notice is considered received by this record. The date and time of this notice is that time stamped by the CCO computer system. It is not required to reply to or acknowledge this email notice.
- (f) This notice will be communicated by a truncated SMS message.
- (g) This notice will be published on the CCO internet site in the public domain. Refer to <https://www.oatis.co.nz>
- (h) The CCO will notify the TSOs by telephone of this notice

Termination of Critical Contingency

(OATIS notice #8012 published at 22:34)

This Notice is issued to notify you that the CCO has determined that the Critical Contingency has been terminated under **Regulation 60** of the Gas Governance (Critical Contingency Management) Regulations 2008.

1. Time and date contingency terminated

10:34pm 13th July

2. Event that caused critical contingency

Unplanned Pohokura outage

3. Areas of transmission system affected

All areas

4. Details of event resolution

Pohokura gas flows have resumed

Notes:

- (a) All directions issued by the CCO pursuant to the termination of the Critical Contingency must be complied with.
- (b) TSOs must issue notices regarding the termination of the Critical Contingency in accordance with **Regulation 61**.
- (c) The communications described in the CCO Communication Plan and TSOs CCMPs are deactivated at the time and date that the critical contingency is terminated.
- (d) The communication of this notice by email is recorded on the CCO computer system and the notice is considered received by this record. The date and time of this notice is that time stamped by the CCO computer system. It is not required to reply to or acknowledge this email notice. It is not required to reply to or acknowledge this email notice.
- (e) This notice will be communicated by a truncated SMS message.
- (f) This notice will be published on the CCO internet site in the public domain. Refer to <https://www.oatis.co.nz>
- (g) The CCO will notify the TSOs by telephone of this notice.