



# COREGROUP

pipeline integrity solutions



22 July 2014

## Critical Contingency Operator 2014 Test Exercise Report

Exercise Evolution

Prepared for:

**Gas Industry Company**

## CONTENTS

1. Introduction	3
1.1. Regulatory Requirements	3
1.2. Exercise Scenario	3
1.3. Exercise Reporting	3
1.4. TSO Exercise Report	4
1.5. CCO Assessment	4
1.6. Recommendations	5
2. Pre Test Exercise Audit of TSO by CCO	7
3. TSO Test Exercise Objectives	11
4. Summary of TSO report Observations and Recommendations	19
5. CCO Test Exercise Objectives	24
6. Retailers and Consumers Test Exercise Objectives	29
7. Asset Owners Test Exercise Objectives	31
<b>Appendix A – Exercise Interjects</b>	32
<b>Appendix B – Exercise Timeline</b>	33
<b>Appendix C – Notice Summary</b>	36
<b>Appendix D – Asset Owners Public Statements</b>	37
<b>Appendix E – Analysis of Large Consumer and Retailer Updates</b>	39
<b>Appendix F – Large Consumer Feedback and Retailer Self-Assessment Forms</b>	41

## Acknowledgment

The success of the exercise was directly attributable to the time and effort contributed by the participants during the planning, execution and feedback phases. These contributions are recognised and appreciated and have assisted in identifying valuable improvement opportunities.

Particular thanks go to the observers provided by MDL, Vector and the Gas Industry Company.

## 1. Introduction

### 1.1. Regulatory Requirements

The Critical Contingency Operator (CCO) is required by regulation 34 of the Gas Governance (Critical Contingency Management) Regulations 2008, to instigate test exercises. These should test:

- that the Critical Contingency Management Plans (CCMPs) comply with regulation 25 and achieve the purpose of the regulations
- that the CCMPs contain the contact details required by regulation 25 and that they are current
- that the Retailers' list of emergency contact details required by regulation 43 are current

After the exercise, regulation 34 also requires that:

- Within 10 business days of the exercise each Transmission System Owner (TSO) must provide a report to the CCO explaining why its CCMP does or does not comply with regulation 25 and gives effect to the purpose of the regulations; identifies improvements and recommends CCMP amendments.
- Within 10 days of receiving the TSO reports, the CCO provides a report to the industry body that assess the effectiveness of the CCMPs; evaluates any amendments recommended by the TSOs; and identifies any amendments to the regulations, CCMPs, communications plan or information guide that would improve the effectiveness in achieving the purpose of the regulations.

After the exercise a change process occurs to implement the recommendations arising from the exercise reports, with consultation where appropriate.

### 1.2. Exercise Scenario

The exercise involved the coincidence of two transmission system incidents:

- a strike on the Maui pipeline requiring the isolation of a section in the Taranaki area, which effectively divided the transmission system in two creating a shortage of gas in the northern part.
- an unplanned outage of the Pohokura gas field on which the northern system had become even more dependent, due to the isolation above.

The complete interjects are detailed in appendix A.

### 1.3. Exercise Reporting

This report is based on:

- The Vector and MDL TSO post exercise reports
- Retailer self-assessment forms and large consumer feedback
- Observations from observers placed in the TSO and CCO offices during the exercise.
- The CCO's own observations

## **1.4. TSO Exercise Report**

MDL's TSO report considers that the current MDL CCMP complies with regulation 25 and when implemented during the test exercise gave effect to the purpose of the regulations. Vector's TSO report considers that the test exercise showed that the Vector CCMP complies with Regulation 25 and when implemented also gives full effect to the purpose of the Regulations.

The TSO's did not make any recommendations to change the CCMPs or the regulations. The MDL TSO report made 10 recommendations and the Vector TSO report made 2 recommendations. They all relate to managed internal processes.

However, MDL did note a future CCMP update could include a section clarifying the roles Vector (as Technical Operator) performs on behalf of MDL during critical contingencies. Vector's TSO report noted a future CCMP update could include a "Status Update" proforma to Appendix 5 "Proforma Notices".

## **1.5. CCO Assessment**

The CCO assesses that the CCMPs were effective in achieving the purpose of the regulations, with the exception of some regulation 38 requirements.

There are no TSO proposals to amend the CCMPs for the CCO to evaluate.

No immediate amendments to the regulations, CCMPs, communications plan or information guide have been identified by the CCO from the exercise. However, there are a number of recommendations that relate to more detailed processes that should be followed through that would improve the effectiveness of the CCMPs, communications plan and information guide processes. It is likely that in following through these recommendations the need to change these documents could arise.

Many of the Critical Contingency processes are manual and because they involve a number of parties all performing their separate regulatory roles, aren't always the most efficient or seamless from a process perspective. Some observations from the exercise highlight this from different perspectives. There is therefore a general question raised regarding the appropriate level of investment that should be made to improve processes (for example through automation), given the costs and the benefits that will be delivered.

## 1.6. Recommendations

The following is a summary of all recommendations arising from this report, some of which originate from the TSO post exercise reports:

<i>Item</i>	<i>Recommendation</i>	<i>Party</i>
1	Review alarm set points for the specific CC thresholds being monitored on SCADA and establish appropriate early warning alarms to warn the operator when the pressure is approaching a threshold breach (i.e. To provide suitable warning prior to the breach occurring).	TSOs
2	Investigate and implement as appropriate early warning alarms (as per Recommendation 1 above) and threshold breach alarms to warn the operator of a potential and/or actual breach of the CC threshold at 'any other gas gate' (as defined in the MDL and Vector CCMP's) where that gas gate has SCADA telemetry installed.	TSOs
3	Consider the establishment of a test communication if no actual alert communication has occurred from the TSO to the CCO in the period (e.g. on a monthly basis)	TSOs
4	Review the current contact lists to ensure the contact information is up to date, complete and accurate.	TSOs
5	Review the Contact List maintenance process to include a mechanism for ensuring that key contacts that are occasional users of OATIS are kept up to date.	TSOs
6	Review the current notice production/review/posting processes to identify any opportunities to improve speed of issue and accuracy of content.	TSOs/CCO
7	Review large consumer/retailer update process to eliminate the apparent confusion for some parties.	TSOs
8	Consider including script / prompt for Gas Controller to use when calling the CCO 24/7 answer message service to ensure succinct and accurate messages are provided.	TSOs
9	Update TSO Procedure 3207704 to prompt more frequent communication with CCO by telephone. Add page breaks into procedure for different stages, and add in processes around the requirement for diligent CCO notice review.	TSOs
10	Consider how CCO should exercise/manage its right to instruct reconfiguration of transmission system (under Regulation 53 (1) (dc) and consider any special communications	CCO
11	Ensure that the roles Vector performs on behalf of MDL during critical contingencies are correctly documented in all updates through the notice review process. Consider clarification in the next iteration of the CCMP.	TSOs
12	Incorporate a proforma Status Update notice into Vector scheduling team process	TSOs

<b>Item</b>	<b>Recommendation</b>	<b>Party</b>
<b>13</b>	<p>Vector procedures now nominate a dedicated CCO Liaison Role to take over Duty Officer responsibilities in an event where the Duty Officer becomes Incident Controller for an emergency on Vector or MDL Assets. This has never been tested.</p> <p>Vector to test role during their next Emergency Exercise. This is also likely to result in the need for revision to the TSO/CCO Communications Protocol.</p>	TSOs/CCO
<b>14</b>	Set up automatic transfer of SCADA data from the TSO to the CCO as soon as practical, and pursue the CCO's access to TSO real-time SCADA.	TSOs
<b>15</b>	Clarify the TSO compliance role for managing Retailer updates and adjust the TSO/CCO Communications Protocol	TSOs
<b>16</b>	Complete the provision of Transmission System drawings to CCO that clearly identify key features of the system including isolation points to ensure that CCO and TSO have a common understanding of how the system has been affected, changed or modified during an event.	TSOs
<b>17</b>	CCO to consider how to involve the TSO representative in the preparation of the next exercise, for example a more careful briefing of the exercise expectations may be appropriate.	CCO
<b>18</b>	Review proposed MPOC curtailment from this exercise to see if the suggested impact would have occurred. Apply learnings to review / decision making processes as necessary.	TSOs
<b>19</b>	Consider if a "partial restoration of curtailed demand" proforma notice should be included in the Communications Plan and Information Guide	CCO
<b>20</b>	Investigate and resolve (correct or document reasons for) differences in the calculation of available Line pack between CCO model and TSO SCADA	CCO/TSOs
<b>21</b>	Review Security of Supply notices and Commercial Operator/Technical Operator communication processes to ensure support systems will work reliably to meet the requirement of the regulations and be consistent across the Technical/Commercial/CC Operators.	TSOs

## 2. Pre Test Exercise Audit of TSO by CCO

The pre-exercise elements were audited on the 10th June 2014 (15 days prior to the actual exercise date). All items were audited by holding a pre-arranged interview with Ryan Phipps (Vector Senior Manager Transmission Services) and Grant Lander (Vector Control Room Manager).

As part of the pre-exercise audit, checks were carried out with respect to progress and/or the current status of actions and recommendations identified in previous pre-exercise audits, where appropriate. Relevant comments are included in the observations below, where appropriate.

Test Objective	Ref	Description
The CCMP provides for compliant thresholds that meet the purpose of the regs	R25(1)(a)	Check that they are still representative and any system changes have been considered
	R38 (1A) (a) (i)	Check that the SCADA system has appropriate alarms set
	R38 (1A) (b) (ii) (A)	Check that the threshold information is reaching the CCO in an effective/timely fashion

### Observations:

#### **Thresholds**

The MDL CCMP V7 (13/05/2014) has recently been reviewed and issued. The Vector CCMP V10 has also been reviewed, but not formally issued at the time of the pre-exercise audit. The specific thresholds remained the same but CCMPs had the “any other gate station” threshold added.

It was noted from previous pre-exercise audits (‘Exercise Initial’ on 25/02/2010 and ‘Exercise Tuarua’ on 16/03/2011) that recommendations were made from both exercises to review the defined threshold for KGTP inlet. The threshold is 4 hours to 37.5barg and it had previously been found that:

“... the 4 hour time limit is often approached due to the way in which the 300line operates and its greater sensitivity to pressure and demand fluctuations. The commissioning of Kupe production station has changed this dynamic and gives greater flexibility to maintain satisfactory pressure at the inlet to KGTP.”

The recommendation in both cases was to review this threshold.

Discussions with the Control Room Manager and Transmission Services Manager have indicated that there are no longer issues being experienced from an operational perspective with regard to the threshold being reached during normal operational cycles, therefore the threshold will remain as currently specified.

#### **SCADA Alarms**

All threshold values specifically defined for the Vector and MDL transmission systems are monitored within SCADA and are displayed on the Gas Operating Centre SCADA screens. The SCADA alarm settings were reviewed and it was established that alarms have been set to alert operators when a threshold value is breached. It was noted that there are no earlier warning alarms set to warn the operator when the value is approaching a threshold breach.

It is also not clear if alarms have been set to alert the operator that a threshold value for “any other gas gate” as defined in the TSO CCMP’s is approaching a threshold breach or has breached. Not all gas gates are directly monitored through SCADA, but it is understood that a number of ‘other gas gates’ are monitored.

<i>Item</i>	<i>Recommendation</i>	<i>Party</i>
1	Review alarm set points for the specific CC thresholds being monitored on SCADA and establish appropriate early warning alarms to warn the operator when the pressure is approaching a threshold breach (i.e. To provide suitable warning prior to the breach occurring).	TSOs
2	Investigate and implement as appropriate early warning alarms (as per Recommendation 1 above) and threshold breach alarms to warn the operator of a potential and/or actual breach of the CC threshold at ‘any other gas gate’ (as defined in the MDL and Vector CCMP’s) where that gas gate has SCADA telemetry installed.	TSOs

**Communication**

A Communications Protocol (D.N: CCO-021 V-1.0) has been jointly developed and agreed between the TSO and CCO, which details the appropriate communication channels, contact details and escalations paths for communication between the CCO and TSO during BAU situations, abnormal situations, as well as potential and actual critical contingencies. A copy of the relevant sections of this protocol was included in the Control Room Operators Emergency Response Manual. The manual also includes a TSO Critical Contingency Response Checklist (D/N: 3207704 R6) which has been updated to align with the Communications Protocol. As at the date of the pre-exercise audit, there had not been any instances where the TSO had contacted the CCO with respect to the CC thresholds, so there were no examples that could be used to validate that “threshold information is reaching the CCO in an effective/timely fashion”

<i>Item</i>	<i>Recommendation</i>	<i>Party</i>
3	Consider the establishment of a test communication if no actual alert communication has occurred from the TSO to the CCO in the period (e.g. on a monthly basis)	TSOs

Test Objective	Ref	Description
The CCMP contains description of the events that the TSO considers may feasibly result in a breach of the thresholds	R25(1)(b)	Check these are complete, valid and up to date with learnings from previous exercises/events or recent system changes reflected

**Observations:**

It was noted from previous pre-exercise audits ('Exercise Initial' on 25/02/2010 and 'Exercise Tuarua' on 16/03/2011) that recommendations were made for

“Vector and MDL to amend section 2.2 of their CCMPs to include NROs and include the CCO on the NRO circulation list. This will allow the CCO to operate at a heightened state of readiness for the duration of any operations should conditions result in a breach of a threshold.”

Discussions with the Vector Control Room Manager and Vector Senior Manager Transmission Services have indicated that there is no longer a need to include the CCO on the NRO Circulation. Two additional processes have been established that provide the CCO with advance warning/visibility of planned non-routine operations on the pipelines that could have an impact on security of supply. They are (1) the provision of monthly pipeline status update reports and (2) the posting of OATIS non-critical advisory notices for NRO's that could have an impact on the security of supply of the pipelines.

The CCO's initial experience of this new process is that it is helpful.

Test Objective	Ref	Description
The CCMP contains actions that the TSO may take to remedy any threshold breach	R25(1)(c)	Check these are complete, valid and up to date with learnings from previous exercises/events or recent system changes reflected. These should deal with the events described re (b) above.

**Observations:**

The MDL CCMP V7 (13/05/2014) has recently been reviewed and issued. The Vector CCMP V10 has also been reviewed, but not formally issued at the time of the pre-exercise audit. With regard to the actions taken in response to CC events, both CCMP's make reference to the Pipeline Emergency Response Plans and associated Specific Event Guides which are internal emergency management plans. A brief review of some sample Specific Event Guides showed that some have been recently updated and they were accessible via the QMAP documentation management system, while others were in the process of being updated and made accessible. Generally, it was found that the plans are being actively managed and kept up to date.

Test Objective	Ref	Description
The contact details in the CCMP are current: <ul style="list-style-type: none"> <li>Gas storage operators</li> <li>Gas production operators</li> <li>Large consumers directly connected</li> <li>Interconnected parties; retailers and shippers</li> <li>Gas distributors</li> </ul>	R25(1)(i)	Are these being regularly updated and entered into OATIS accurately?

**Observations:**

Copies of the Vector and MDL contact reports generated in OATIS were obtained for review. The contacts are used by OATIS to automatically send emails and SMS text messages to affected parties alerting them to the existence of the full notices in OATIS. The full notice is not sent with the email or text alert and affected parties have to access the notices on the OATIS website.

**MDL OATIS Contact List**

The following observations were made from a review of the MDL OATIS Contact List (which may or may not be material):

- Some contacts don't have any contact information associated with them (i.e. phone, cell phone, email)

**Vector OATIS Contact List**

The following observations were made from a review of the Vector OATIS Contact List (which may or may not be material):

- There is no contact information recorded for Ballance AUP
- It is not clear if there are any contacts recorded for the Gas Storage facility
- There are a number of contacts recorded for E-Gas
- Some contacts are repeated (e.g. with slightly different spelling)
- There are contacts for some people who have left that organisation or the industry

It was noted from previous pre-exercise audits ('Exercise Initial' on 25/02/2010 and 'Exercise Tuarua' on 16/03/2011) that:

"Vector remind Ballance AUP to enter their contact details in OATIS"

Discussions with the Vector Control Room Manager and Vector Senior Manager Transmission Services did not readily reveal any process for ensuring that non-regular users of OATIS keep their contact details up to date in OATIS. Also, it is possible that some key contacts (e.g. Ballance AUP) may be routinely missed by the current process (given the findings of previous audits).

Item	Recommendation	Party
4	Review the current contact lists to ensure the contact information is up to date, complete and accurate.	TSOs

5	Review the Contact List maintenance process to include a mechanism for ensuring that key contacts that are occasional users of OATIS are kept up-to- date.	TSOs	
---	--	------	--

### 3. TSO Test Exercise Objectives

Test Objective	Ref	Description
The CCMP has a process for demand curtailment and restoration consistent with the purpose of the regs	R25(1)(d)	Observe the processes during the exercise and note their effectiveness

**Observations:**

Both curtailment, revised curtailment and restoration notices were issued successfully and in accordance with CCMPs. A summary of the notices issued by the CCO to the TSOs and by the TSOs to relevant parties are included in Appendix C.

The process for issuing notices curtailment/restoration is as follows:

- CCO sends a draft notice by email to the TSO Duty Officer for review. The notice is an MS Word attachment. (Note the Regulations do not require the CCO to consult with the TSO prior to issuing curtailment or restoration instructions, however the CCO will take into account communications from the TSO)
- TSO reviews the draft notice and provides comment/confirmation back to the CCO by email.
- CCO issues the formal notice to the TSO and copies relevant stakeholders. (The notice is in the body of the email and also as a pdf attachment)
- The TSO Duty Officer forwards the notice to Duty Scheduler who then prepares a “critical notice” in OATIS to which the CCO notice is attached. The critical notice “Detail” field states “You are instructed to comply with the curtailment directions set out in the attached notice from the Critical Contingency Operator”.
- OATIS system initiates an email and text message notice.

The preparation and issuing of notices is a manual process. Given that the TSO is relying on utilising the CCO notices to fulfill their obligations for issuing instructions it is important that the TSO carries out a thorough review of the notice to ensure it meets their regulatory obligations.

In a real situation the TSO is likely to have more information to hand on the event than the CCO so notices may take a few iterations to get both parties on the same page.

Ideally it would be good to reduce the time to complete the mechanics of notices to maximize the opportunity for quality control processes to be applied. Depending on circumstances there can be significant time pressure on the notice production and review process.

There was some confusion about the process for Retailer and Large Consumer updates:

- outdated templates were used
- there was confusion about which e-mail addresses to send them to
- retailers were unclear about whether to send an update if they had no customers affected
- retailers were unclear about whether they should stop sending them once full compliance had been achieved
- one affected large consumer sent no update during the exercise (it was submitted afterwards when requested)
- retailers were concerned about the timeframes set for updates (although this was to some extent a feature of exercise pressure, the point has been taken on board)
- a number of suggestions have been made by Retailers for the TSOs to consider, in the self-assessment forms

Feedback from Methanex (detailed at appendix F) should also be considered in relation to recommendations 6 and 7.

<i>Item</i>	<i>Recommendation</i>	<i>Party</i>
6	Review the current notice production/review/posting processes to identify any opportunities to improve speed of issue and accuracy of content.	TSOs/CCO
7	Review large consumer/retailer update process to eliminate the apparent confusion for some parties.	TSOs

<b>Test Objective</b>	<b>Ref</b>	<b>Description</b>
The CCMP has a communications plan describing how the TSO will communicate to and from the participants and within what timeframes	R25(1)(e)	Monitor the communications and check for clarity and timeliness

**Observations:**

CCMPs do include a communications plan describing how the TSO will communicate to and from the participants and within what timeframes. All notices received by the TSO were posted on OATIS and the contacts recorded in OATIS were notified by SMS and email.

Section 3 of the MDL CCMP details the communication plan. Vector procedure 3207704 “Critical Contingency Response Actions” was utilised during the exercise to facilitate correct communications, with status update information contained within the Security of Supply Update form. This procedure, form and the communication process used was consistent with that described in section 3 and 6 of the MDL CCMP. Additionally, the security of supply updates enabled MDL to publish an update consistent with Regulation 54A and section (2) of schedule 5 of the Regulations, as detailed in section 3.11 of the MDL CCMP.

Communications between TSO and CCO appeared timely and well understood between both parties. However, it was noted there was a delay in the Duty Officer notifying the CCO

after the second interject, such that the CCO was unaware for 25 minutes of the Pohokura outage. This in turn delayed the revision of the curtailment to band 3. The delay was reported as human error by the TSO – the result of a misunderstanding relating to communication processes during the exercise.

The CCO and TSO has developed a Communications Protocol (CCO-021) which details the communication requirements prior to and during critical contingency events. The TSO obligations start with alerting the CCO, within 15 minutes, of any event within the transmission system that has the potential to create a critical contingency.

The TSO reported that the first contact from the TSO to the CCO was by the TSO Gas Controller who called the CCO 24/7 Answer Messaging Service (AMS). The initial call “dropped out” so the Duty Gas Controller called again and left a message. In parallel with this the TSO Duty Officer also called the answer message service. Both messages were received by the CCO key personnel.

The TSO reconfigured the transmission system as a response to the scenario (redirected 0.75 TJs up the 200 line north). This resulted in discussions during the debrief about the TSOs reconfiguring the system and how the CCO should exercise and manage its right to instruct (under Regulation 53 (1) (dc). It prompted thoughts about how this would work in practice, what the communication should be between the TSO/CCO and whether there should be a notice template.

Some communications and notices made either an incorrect or ambiguous reference to the capacity or role Vector was performing on behalf of MDL during critical contingency circumstances.

There is no Status Update proforma notice in the Vector CCMP.

<i>Item</i>	<i>Recommendation</i>	<i>Party</i>
<b>8</b>	Consider including a script / prompt for Gas Controller to use when calling the CCO 24/7 answer message service to ensure succinct and accurate messages are provided.	TSOs
<b>9</b>	Update TSO Procedure 3207704 to prompt more frequent communication with the CCO by telephone.  Add page breaks into procedure for different stages, and add in processes around CCO notice review.	TSOs
<b>10</b>	Consider how CCO should exercise/manage its right to instruct reconfiguration of transmission system (under Regulation 53 (1) (dc) and consider any special communications.	CCO
<b>11</b>	Ensure that the roles Vector performs on behalf of MDL during critical contingencies are correctly documented in all updates through the notice review process. Consider clarification in the next iteration of the CCMP.	TSOs
<b>12</b>	Incorporate a proforma Status Update notice into scheduling team process	TSOs

Test Objective	Ref	Description
The CCMP contains the contact details of suitably qualified TSO employees responsible for giving communications and directions under the CCMP and comms plans	R25(1)(f)	Monitor how roles are allocated within the exercise and how comms and directions are given

**Observations:**

The CCMPs (Section 6.1 of the MDL CCMP and Appendix 6 of the Vector CCMP) contain appropriate and up to date contact details. These were used to establish initial contact between the TSO and the CCO at the start of the exercise.

Observers noted that throughout this exercise, the Duty Officer was extremely busy with communications work. Had the exercise been real, they would have had responsibility for coordinating the response to loss of containment on the Maui Line. All communications were also occurring through the Duty Officer computer login and phone. A question was raised as to whether things would actually as per the exercise in a real event.

One Gas Controller was assigned the task of sending SCADA data files to the CCO every 30 minutes. They had no other distractions during the course of the exercise. Again, in a real situation there would be many other activities taking place and having one person dedicated to sending a data file would not be an effective use of resources. Also, it may be necessary in some situations for the CCO to receive updated SCADA data more often (eg at 15 minute intervals).

It is the CCO's view that automating the sending of SCADA data to the CCO would free up resource at the TSO end and the CCO end, and also provide other benefits, such as providing an independent communications channel (not dependent on manual action being taken by the TSO). As an example, the Pohokura trip would likely have been self-evident and curtailment compliance also becomes evident. The CCO has formally requested that an automatic data transfer protocol be established between the TSO and CCO under regulation 38 and the GIC is supporting this. The current arrangements for the transfer of SCADA data and the lack of an automated process are currently noted as a significant risk on the CCO risk register.

The compliance role for managing Retailer updates was filled by a Vector Commercial representative remotely. It may be worthwhile clarifying this process and adding it to the TSO process documentation.

Item	Recommendation	Party
13	<p>Vector procedures now nominate a dedicated CCO Liaison Role to take over Duty Officer responsibilities in an event where the Duty Officer becomes Incident Controller for an emergency on Vector or MDL Assets. This has never been tested.</p> <p>Vector to test role during their next Emergency Exercise. This is also likely to result in the need for revision to the TSO/CCO</p>	TSOs/CCO

	Communications Protocol.	
14	Set up automatic transfer of SCADA data from the TSO to the CCO as soon as practical, and pursue the CCO's access to TSO real-time SCADA.	TSOs
15	Clarify compliance role for managing Retailer updates and adjust the TSO/CCO Communications Protocol.	TSOs

Test Objective	Ref	Description
The CCMP details circumstances in which the TSO may consider restoration should be directed in an order different from the regs	R25(1)(g)	Observe the consideration given by the TSO to restoration

**Observations:**

Both CCMPs (Section 4.4 of the MDL CCMP and section 5.5 of the Vector CCMP) detail the steps taken for considering alternative restoration arrangements.

In practice in this exercise it was the CCO conversation with the Transpower System Operator that led to a modification of restoration, with preference given to restoring gas supply to Southdown Power Station to maximise electricity security of supply with the available gas.

Test Objective	Ref	Description
The CCMP has a process to determine the contingency imbalances	R25(1)(h)	Are these processes up to date and have they been verified recently? Have recent system changes and MPOC/VTC changes been incorporated?

**Observations:**

Section 5 of the MDL CCMP contains a detailed 12 step process for contingency imbalance calculation methodology. If the test scenario was real, imbalance calculations would have been required because the event was declared as a non-regional event (regional events do not require imbalance calculations).

Appendix 8 of the Vector CCMP contains a detailed 25 step process for contingency imbalance calculation methodology. This section also describes how Vector will properly integrate the Contingency Imbalance regime prescribed in the Regulations with Vector's business-as-usual regime under section 8 of the VTC.

Both CCMPs (which include imbalance methodologies) have recently been reviewed and approved by an Expert Adviser and GIC.

Test Objective	Ref	Description
The CCMP provides effective mechanisms for making	R25(1)(j) R38	A detailed check needs to be made against each item of R38 and note made

information available to the CCO	Comms Protocol	of the ease, accuracy and timeliness of the information that is reaching the CCO
----------------------------------	----------------	--

**Observations:**

The CCMPs (Section 3.9 of the MDL CCMP and section 3.8 of the Vector CCMP) address Communications with the CCO. They primarily defer to the CCO Communications Plan for the detail. Exercise Evolution was carried out in a manner consistent with the current CCO Communications Plan.

The CCMPs also refer to the fact that the CCO has developed a Communications Protocol with TSOs. This TSO/CCO Communications Protocol sets out the information requirements that apply to TSOs during normal system conditions, abnormal system conditions as well as potential or actual Critical Contingency events. These requirements are consistent with regulation 38 and 38A.

Detailed communication was also managed through the Vector procedure 3207704 “*Critical Contingency Response Actions*”, with status update information contained within the *Security of Supply Update* form. This procedure, form and the communication process used was consistent with that described in the CCMPs (section 3 and 6 of the MDL and Appendices 1 to 7 of the Vector CCMP).

Transmission system information flows as per TSO/CCO Communications Protocol (referred to in CCMP) appeared to work well. A SCADA download was provided every 30 minutes manually by dedicated resource, but as noted above an automated process would be a better use of resource. The manual nature of the data transfer process (e.g. to extracting data, creating and saving files, emailing, saving email attachments into specific file locations, linking the CCO model to the new file, etc) places additional demands on already busy personnel. It can cause distractions and can detract from the speed and quality of other key activities (such as key decision making processes and the preparation and communication of Critical Contingency notices. Refer recommendation 14 above.

The CCO requested a plan of the isolated valves with their tag numbers to ensure correct understanding of the scenario and in particular to understand the effect on the Methanex plant and to determine whether the event should be regional or non-regional. The TSO produced a hand drawn diagram and e-mailed this across to the CCO. It was noted that the drawing supplied contained several inaccuracies which had the potential to cause confusion around pipeline isolation points, and the impact on affected customers. This is understandable given the timeframes involved in producing the diagram, but it also reinforces the need for the establishment of a good quality set of system drawings that can be shared between the CCO and the TSO. The current situation regarding system drawings is currently noted as a significant risk on the CCO risk register, and it is a workstream that is currently underway between the TSO and CCO.

The Duty Officer was confused by the interject having predetermined the isolations, but without any additional technical detail that would have been available if the TSO had actually undertaken the process of isolation. The exercise design had assumed the TSO would identify this additional detail as a part of the exercise. Future exercises could benefit from increased guidance being provided regarding the expectations and any assumptions regarding actions or responses from participants.

<b>Item</b>	<b>Recommendation</b>	<b>Party</b>
16	Complete the provision of the Transmission System drawings to CCO that clearly identify key features of the system including isolation points to ensure that CCO and TSO have a common understanding of how the system has been affected, changed or modified during an event.	TSOs
17	CCO to consider how to involve the TSO representative in the preparation of the next exercise, for example a more careful briefing of the exercise expectations may be appropriate.	CCO

<b>Test Objective</b>	<b>Ref</b>	<b>Description</b>
The protocol for informing the CCO of potential CC conditions	R25(1)(j) R38(1A)(a)(i)	CCO to be alerted within 15 minutes

**Observations:**

Section 2 of the Vector and MDL CCMPs address pre-critical contingency and set out the conditions under which the TSOs will notify the CCO of an event it believes could or would result in a Critical Contingency scenario. It also references the CCO Communications Plan for the detail. Exercise Evolution was carried out in a manner consistent with the current CCO Communications Plan.

The initial interject was relayed to the CCO within the timeframes. However, there was TSO discussion after the first interject about whether the event was a potential or actual critical contingency. The CCO is dependent on the TSOs explanation of the scenario and for information of where the system is against thresholds. In the early stages the observers noted the TSO seemed unclear about whether there was a breach and it required persistent CCO questioning for the TSO to confirm that there had been a breach of thresholds at Faull Rd and Bertrand Rd (Waitara Valley). This led to some delay in the declaration. This supports the need for recommendation 2.

<b>Test Objective</b>	<b>Ref</b>	<b>Description</b>
The CCMPs are consistent with the MPOC, VTC	R25(2)	Have the CCMPs been reviewed for recent changes to MPOC/VTC?

**Observations:**

The CCMPs have recently been reviewed, which included consideration of consistency with the VTC and MPOC. The TSOs have reported that no inconsistencies between the CCMP and VTC or MPOC were picked up as a result of this exercise.

In terms of the exercise, Vector would have directed a curtailment of the Kupe Production Station by 2TJs/hour and reconfigured the transmission system to deliver 0.75TJs/hour north up the 200 line.

As part of the scenario, the SENZL nominations team curtailed the Ngatimaru Road (Receipt) Welded Point's Scheduled Quantity to 121, 209 GJ, under Section 15.2 (c) of the

MPOC.

The MDL initial proposal of curtailing all delivery points north of Frankley Road caused some concern. It was queried by the CCO and later changed to Oaonui's injections being reduced. The concern was that the first proposal would not be the optimum solution for reducing pressure in the southern section, and indeed could be counter-productive to preservation / optimisation of Line Pack in the northern section, as those producers who can still inject in the northern section may have had their Scheduled Quantities reduced.

Item	Recommendation	Party
18	Review proposed MPOC curtailment from this exercise to see if the suggested impact would have occurred. Apply learnings to review / decision making processes as necessary.	TSOs

#### 4. Summary of TSO report Observations and Recommendations

##### Extracted from MDL TSO Report

Ref	Observation / Comment	Recommendation	Action By:	Due Date:
M2014/1	CCO Phone dropped for voicemail first time. Second message went through successfully.	Note, the CCO received updates reflecting both calls. The Vector Procedure could be enhanced by including script / prompt for Gas Controller to use for voicemail.	TO	30/9/14
M2014/2	Some confusion created for Duty Officer due to interject having predetermined how the Technical Operator would respond / what isolations would be, but without additional technical detail available that would be the case had technical operator actually done the task.	CCO to consider involving suitable TSO representative in developing scenario detail, to ensure Duty Manager and Control Room are receiving interjects consistent with actual TO processes.	CCO	Next Exercise
M2014/3	Info flows between TSO/CCO – e.g. SCADA seemed in line with current expectations – on time – files named properly. Generally the communications between TSO/CCO were good (efficient conversations, to the point etc.) 3207704 and SSA template works well for Duty Officer and Gas Control. First response time was good (interject 1), however CCO didn't know that Pohokura had fallen over for about half an hour. High reliance on email communications observed.	Update Procedure 3207704 to prompt more conversation with CCO over phone. Add page breaks into procedure for different stages, and add in processes around CCO notice review <sup>1</sup> . The delayed Pohokura notice was human error – confusion over Exercise Control Interject vs. a communication from CCO. No further action required.	TO	30/9/14

<sup>1</sup> See also item M2014/6

Ref	Observation / Comment	Recommendation	Action By:	Due Date:
M2014/4	<p>The data provided here is designed to serve the dual purposes of:</p> <ol style="list-style-type: none"> <li>1. keeping the CCO and key TSO personnel informed of the status of the incident; and</li> <li>2. providing information to the CCO and MDL (as the relevant asset owner) if the public communications requirements of the Regulations (R54A &amp; Schedule 5 are triggered (primarily when band 3 or higher is curtailed).</li> </ol> <p>This is a new area within the Regulations and it was good to see this being tested.</p> <p>MDL is reliant on receiving accurate, meaningful info from its TO. Also, as both the CCO and the relevant asset owner have public communication obligations under the Regulations, there is a risk of CCO and the asset owner contradicting each other e.g. Maui pipeline repair times.</p> <p>The Security of Supply updates compiled by the TO in the test exercise did not go into the level of detail of outlining the steps being taken to physically repair the Maui Pipeline.</p>	<p>The exercise interjects did not include further updates on the status of the Maui Pipeline Repair. Including a TSO representative in scenario planning (including interjects) would resolve this – refer action M2014/2</p> <p>Review Security of Supply notices and CO/TO communications processes to ensure support systems will work reliably to meet the requirement of the Regulations and be consistent across TO/CO/CCO communications.</p>	TO/CO	30/9/14
M2014/5	<p>Some communications and notices made either an incorrect or ambiguous reference to the capacity or role Vector was performing on behalf of MDL during critical contingency circumstances.</p>	<p>Ensure that the roles Vector performs on behalf of MDL during critical contingency circumstances are correctly documented in all updates through the notice review process (refer to item M2014/6 below).</p> <p>Consider clarification on Vector’s role in</p>	TO/SO/CO	30/9/14

Ref	Observation / Comment	Recommendation	Action By:	Due Date:
		next update of MDL CCMP.		
M2014/6	<p>Time to complete mechanics of notices (all versions) needs to be reduced and quality control techniques improved. There is currently a hurried review process – partially driven by exercise timeframe.</p> <p>Key issues included TSO vs. TO as per M2014/5 observation not picked up, CC-0012 going out with table missing at bottom of email and retailers getting very short time frames to produce reports (less than 20 minutes on one occasion).</p>	<p>Consider how to tighten up review process / learn lessons in this space e.g. use track changes on notices was used on one occasion but no rule in place to formally say this is to be done.</p> <p>One idea is to develop checklist / lessons learned brief for CCO / Duty Officer to use when reviewing notices. For example, to ensure nuanced wording correct and timeframes for compliance are reasonable based on when notice is published.</p>	TO/CCO	30/9/14
M2014/7	<p>Good levels of activity from retailers and large consumers in this exercise, which was a significant positive.</p> <p>This enabled us to see a number of incorrect templates being used, which in some case were also going to the wrong email addresses.</p> <p>Presently retailer compliance reports are going to Gas Control, forwarded to Duty Officer, then forwarded to the CCO. Neither the Duty Officer or Gas Control review nor act on content, so the value of this part of the process is questionable.</p> <p>There was also some confusion from Retailers about whether an update had to be provided where the Retailer has no consumers in the curtailment bands.</p>	<p>Review email distribution requirements for compliance reporting from retailers and large consumers.</p> <p>Follow up with parties using incorrect email address and template as required.</p> <p>Update template and instructions are to be reviewed following feedback from Retailers</p>	Vector and MDL CO's acting jointly	30/9/2014

Ref	Observation / Comment	Recommendation	Action By:	Due Date:
	Proposal is that an email stating "no affected consumers" (or similar) will be sufficient update.			
M2014/8	Concerned expressed by some observers about the proposed MPOC curtailment. Specifically, this was that the proposed MPOC action on the Maui system may need to be reassessed. Curtailing all Delivery Points north of Frankley Road would not be the optimum solution to reducing pressure in the southern section, and indeed could be counter-productive to preservation / optimisation of Line Pack in the northern section, as those Producers who can still inject in the northern section may have their Scheduled Quantities reduced. Perhaps a better focus would be reducing Oaonui's injections.	Review proposed curtailment from this exercise to see if the suggested impact would have occurred. Apply learnings to review / decision making processes as necessary.	SO/TO/CO	30/9/2014
M2014/9	Throughout this exercise, the Duty Officer was extremely busy with communications work. Had the exercise been real, they would have had responsibility for coordinating the response to loss of containment on the Maui Line. All communications were also occurring through the Duty Officer computer login and phone. Would things actually work as per today in a real event?	Vector procedures now nominate a dedicated CCO Liaison Role to take over Duty Officer responsibilities in an event where the Duty Officer becomes Incident Controller for an emergency on Vector or MDL Assets. This has never been tested.  Vector to test role during their next Emergency Exercise.	TO/CCO	30/9/2014
M2014/10	Notice template names are not clear if they mean partial or full restoration of bands: " <i>Restore Curtailed Demand Notice</i> ".  In practice, partial restoration of Band 2 was being directed.	Consider if use of Partial Restoration of Curtailed Demand Notices are worth adding as templates.	CCO	30/9/2014

**Extracted from Vector TSO Report**

Ref	Observation / Comment	Recommendation	Action By:	Due Date:
V2014/1	<p>In support of managing the overall CC event, Vector as TSO curtailed Kupe Production Station by 2TJ and redirected 0.75TJ's up the 200 line north.</p> <p>This resulted in various discussions about Vector reconfiguring system. How would CCO exercise and manage its right to instruct in this space? How does the CCO wish to be updated that TSO intends to do this.</p>	<p>CCO to consider how it would exercise/manage its right to instruct reconfiguration of Transmission Systems.</p> <p>CCO to consider any special communications needs in respect of TSO's reconfiguring their systems during an event.</p>	CCO	30/9/2014
V2014/2	There is no Status update proforma notice in the Vector CCMP.	Incorporate proforma notice into Vector scheduling team process – the proforma status notice is included in the CCO's Communication Plan	TSO	30/9/2014

## 5. CCO Test Exercise Objectives

Test Objective	Ref	Description
CCO Process for determining, declaring and notifying critical contingency	R48 – 50	Observe how the CCO makes these decisions and acts accordingly
<p><b>Observations:</b></p> <p>The observers noted interactions between the CCO and TSO appeared calm and generally well understood by both parties. There was no obvious clash of processes or differences in expectations.</p> <p>Both phone calls by the TSO to the CCO answering message service correctly gave rise to accurate messaging to the CCO key personnel, alerting them to a potential incident and prompting them to contact the TSO.</p> <p>There was some delay waiting on Gas Control to confirm that a technical breach had occurred in the first instance (possibly due to nature of scenario and trigger conditions). Around 50 minutes between Gas Control's 1<sup>st</sup> call to the CCO and the declaration notice being sent. See comments against the TSO protocol for informing the CCO of potential CC conditions and recommendation 2.</p> <p>Despite a contact database check being completed by the CCO only a few days prior to the exercise, a few bounce-backs and requests for changes to contact details were received by the CCO during the exercise. These were handled on a priority basis during the exercise by the Duty CCO, with the remainder being worked through after the exercise but is a timely reminder to all participant's to take an active part in contact update processes to keep this type of activity to a minimum during an actual exercise/event.</p> <p>There was an early call to Methanex by the CCO to ascertain how this scenario would affect them and a prompt reply by Methanex confirmed that all of the Methanex processing would have ceased, from all three delivery points.</p>		
Test Objective	Ref	Description
CCO process for determining and declaring regional status	R52A Industry Guidance	Observe the process for determining regional status using the industry guidance and for notifying the determination
<p><b>Observations:</b></p> <p>Observers noted that the regional status was determined promptly and effectively using the guiding principle of "does imbalance help in this situation". It was however somewhat manufactured given the CCO's involvement with scenario planning and earlier correspondence with GIC on the topic of regional status.</p> <p>There was some discussion about whether it needed more 'fanfare' (i.e. one observer</p>		

considered it could be a notice in its own right) but no other observation has been made to this effect so no recommendation has been made, the tension being observations by others about the proliferation of notices during events.

Concern was expressed by one observer about whether a phone call to Greymouth exploring alternative gas supply, prior to the non-regional determination being made, was appropriate. Although the CCO has concluded that providing the conversation is done in an exploratory way to establish how a supplier is placed, an early conversation can be valuable.

It was anticipated the industry may be interested in understanding the logic of the non-regional determination in this scenario post exercise.

The CCO continues to work with the GIC on clarifying the application of the regulations and guidelines in this area.

Test Objective	Ref	Description
CCO processes for issuing notices during a CC event	R51,52, 53, 59	Observe the drafting and issuing of notices and the effectiveness of the communications and information guides

**Observations:**

All notices were sent to the correct stakeholders and contained the correct information and were given within required timeframes.

The observer noted there was a well understood (and prudent) process for a second CCO team member to review all notices compiled by the Duty CCO. Similarly, the TSO was expecting to review drafts. Despite this the CCO acknowledges a couple of errors on the notices (an incorrect reference to a table in a status update and an incorrect listing of affected gates on the first curtailment notice). This reaffirms recommendation 6.

It was also noted that the overall process of issuing a notice (including website, e-mail, SMS and voicemail) is very manual and could possibly be improved by automation. This could also be considered under recommendation 6.

Observers made periodic checks of the CCO website and the CCO 0800 phone message service, which showed the notices were visible and accessible to participants. One observation was made about whether there is scope for the CCO to make the “Latest CC Events” more visible on the CCO website during an actual event. No changes are planned currently.

Several minor procedural points were observed during the exercise (for example whether the recording on the 0800 voicemail system has a time limit), which one observer noted could have been investigated prior to the exercise. There was also one incident of a text notice being truncated which could have caused confusion for the recipients and one instance of the use of personal email address instead of the CCO generic address.

The TSO made the observation that notice template names are not clear if they mean partial or full restoration of bands on the “Restore Curtailed Demand Notice”.

<i>Item</i>	<i>Recommendation</i>	<i>Party</i>
19	Consider if a “partial restoration of curtailed demand” proforma notice should be included in the Communications Plan and Information Guide.	CCO

  

<b>Test Objective</b>	<b>Ref</b>	<b>Description</b>
CCO processes for demand curtailment, exploration of alternative supply and restoration	R53	Observe the effectiveness of the CCO decision making processes for achieving system stability

**Observations:**

Observers noted a good combination of modelling and acting on conversations with stakeholders e.g. talking with Methanex and Transpower re demand and talking to Greymouth/Todd/Shell re supply. Also there was confirmation with the TSO important information such as survival times and exploration of alternative gas supply.

There was generally good communication between the CCO staff about steps being taken and why i.e. team worked well – no obvious panic / uncertainty on how to proceed. There was generally good liaison between the CCO and Large Consumers / Transpower / Upstream providers and TSO.

The TSO informed the CCO that the system had been re-configured. There was no discussion of this with the CCO, nor instruction from the CCO to initiate this configuration although there was no disagreement that it was a constructive action. This reinforces recommendation 10.

The delay in advise to the CCO of the unplanned outage at Pohokura resulted in a delay in the second curtailment. Although this was deemed to be a simple error, it highlights the CCO’s complete dependence on the TSO for timely information. The CCO’s view is that this could be partially mitigated by improved access to real-time SCADA and/or SCADA information (recommendation 14).

A timely call from the CCO to Transpower resulted in input from Transpower leading to a modification of the partial restoration, which would better affect the purpose of the regulations.

<b>Test Objective</b>	<b>Ref</b>	<b>Description</b>
CCO process for determining and notifying termination	R60	Observe how the CCO makes these decisions and acts accordingly

Not applicable – exercise didn’t cover termination, as explained in the end exercise message.

Test Objective	Ref	Description
CCO modelling of the system operates effectively and gives consistent results	R53 R38	The curtailment and restoration decisions are well supported by a robust modelling tool

**Observations:**

The observers believed that the CCO demonstrated their modelling system works well, it appeared robust and comprehensive. It provides for a multitude of scenarios, is configurable for different pipeline situations and can use live SCADA data or forecast volumes. It is however dependent on some manual inputs (e.g. careful naming of SCADA Excel files) which were supplied in a timely and consistent fashion during the exercise, but nonetheless this dependency reinforces recommendation 14.

The modelling does produce differences between SCADA driven output and model output where the observer suggested further investigation should occur to ensure they were fully understood. This is a process which is underway but not yet complete.

Hand-drawn diagrams from the TSO of the isolated area was less than ideal, as these are error prone. Controlled drawings of some assets have been requested and would assist the CCO. Already noted in recommendation 16.

The CCO has raised some requests for information under regulation 38 to support the ongoing development and refinement of its model, including standard drawings and SCADA information and to address its information risks. This has been ongoing work-stream with the TSOs since the handover.

Item	Recommendation	Party
20	Investigate and resolve (correct or document reasons for) differences in the available Line pack between CCO model and TSO SCADA.	CCO/TSOs

Test Objective	Ref	Description
CCO publishes information	Sch 5 R54A	Observe the implementation of the new information requirements, including the information from the asset owner

**Observations:**

The CCO was aware of R54A and Schedule 5(1) triggers for public communications and met the “prior to 1pm” requirement to publish information. Information was received from both MDL as asset owner and from SENZL as operator of the PPS. The CCO kept in touch with Pohokura production station representatives. CCO publications were done on time and contained relevant information. Website and voice messages were checked by observers.

The CCO used words provided to them in notices e.g. “MDL has not yet provided information on repair times”, but this may need to be revisited or added to depending on

the circumstances.

There are however still risks around asset owner(s) and the CCO being given timely advice in sufficient detail and their resulting communications contradicting each other that should be addressed. These are reflected in the observations in the asset owner section below and recommendation 19.

Test Objective	Ref	Description
CCO performs to required standard	SPACCO sch 2	Test the CCO against the Schedule 2 performance standards and target/measures for during and after a CC event for determining; declaring; decision making; communication and termination

**Observations:**

Observers noted that the CCO performed very well, although they also noted that was perhaps understandable as the team were prepared and appropriately resourced for the exercise. Also the information flow from the TSO was good, but in a real event the teams would have more distractions and possibly fewer resources.

Nevertheless it was clear the CCO team were prioritizing the most important tasks and were not sitting on information, but still gave TSO reasonable opportunity to contribute.

## 6. Retailers and Consumers Test Exercise Objectives

All 8 Retailer's participated in the exercise, with 7 at a 'Facilitation' level and 1 at a 'Partial' level.

7 out of 8 Retailer's submitted self-assessment forms (see appendix F). The Novagas self-assessment form was outstanding at the time of this report.

All large consumers participated in the exercise. Updates were received from all during the exercise, with the exception of Mighty River Power in respect of Southdown power station. This was followed up after the exercise by the CCO. MRP had participated in the exercise internally but had misunderstood the scope of the exercise and not realized their update should be submitted. It was submitted on request.

Methanex supplied useful feedback about the notice and update processes (see appendix F) which should be considered as a part of recommendations 6 and 7.

Test Objective	Ref	Description
Ensure the Retailer curtailment plan contains 24/7 contact information for each consumer installation	R43	Retailers' self-assessment reports
All 7 retailer self-assessment forms received reported processes for holding emergency consumer contact details		
Test Objective	Ref	Description
Ensure the Retailer has up to date curtailment band information for each consumer	R43	Retailers' self-assessment reports
<p><b>Observations:</b></p> <p>All 7 Retailer self-assessment forms received involved the Retailer describing their customer's affected using the new curtailment bands.</p> <p>During the exercise Genesis identified some registry changes, to correctly reflect their true band 3 customers which were overstated at the time of the exercise.</p>		
Test Objective	Ref	Description
Confirm each Retailer has a process for keeping contact and curtailment band information up to date	R43	Retailers' self-assessment reports
All of the self-assessment forms reported processes for keeping contacts up to date.		

Test Objective	Ref	Description
Retailers and large consumers to provide regular updates to TSO	R55	Observe the frequency and quality of updates to the TSO during the exercise
<p><b>Observations:</b></p> <p>There was a good level of Retailer participation during the exercise. Only one retailer didn't send in an update and this was because they had no customers affected.</p> <p>CCO analysis of updates showed that there was some confusion over the template. Some parties used a now outdated template showing the old bands; there was a difference in interpretation in how the columns on the template should be used; there was some confusion over where the template should be sent. The end result was somewhat confusing for the CCO as some updates were received multiple times, from different e-mail addresses, and the way the data was presented varied. The retailers have raised a number of queries about the update process which should be worked through and clarified, there are also a number of Retailer suggestions. (See recommendation 7).</p> <p>Comments by Retailers concerned about the timing of the requirement for Retailer updates being too quick after the notice being issued, have been taken on board by the CCO. However it should also be noted that some of the timeframes in exercises had to be compressed to get through all of the test elements in the time available.</p> <p>Genesis provided their first update at 12:09 (which was later than some others, given that the compliance update was requested at 11:00). This is likely related to the general comments from Retailers concerning short timeframes allowed for compliance updates. The Genesis update also seemed to indicate a "shut down profile" was being followed for the curtailment of Unit 5, which was influenced by electricity market commitments and/or obligations. The CCO is following this up directly with Genesis to ensure that a common understanding of the requirements and the curtailment process is clarified.</p>		
Test Objective	Ref	Description
Retailers to give urgent notice to their consumers affected by a CC direction	R56	Retailers' self-assessment reports
<p><b>Observations:</b></p> <p>OnGas (as the only 'Partial' participant) was the only Retailer to use the exercise as a chance to practice their process for communicating with customers.</p> <p>However it was clear from the self-assessment forms that a number of others had used the opportunity to review their processes. A number of Retailers have reported internal process improvements via the self-assessment forms which was encouraging for the CCO to see.</p>		

## 7. Asset Owners Test Exercise Objectives

Test Objective	Ref	Description
The owner of the damaged or failed component publishes the required information	R54A Schedule 5 (2)	If band 3 is curtailed, asset owner publishes information required by sched 5 (2)
<p><b>Observations:</b></p> <p>The affected Asset Owners (MDL for the Maui pipeline and SENZL for the Pohokura field) demonstrated a good understanding of their obligations under the newly modified regulations and delivered good information in a timely fashion (shown in full at appendix D). Consequently the regulatory requirements were met.</p> <p>The CCO and Asset Owner (MDL) are both reliant on information from Vector in its capacity as Technical Operator in order to make public statements. It was expected that some more information would be provided e.g. mobilising people to site, potential repair steps, and expected repair times. The Security of Supply updates compiled by the Technical Operator did not go into the level of detail of outlining the steps being taken to physically repair the Maui Pipeline. The exercise interjects didn't include any further updates on the status of the Maui pipeline repair as the exercise design had assumed the TSO would develop this technical thinking as a part of the exercise. It may be appropriate for the CCO to communicate expectations more clearly in the guidance for TSO participation for future exercises. (Recommendation 17 is already noted).</p> <p>As both the CCO and the relevant asset owner have public communication obligations under the regulations, there is a risk of the CCO and the Asset Owner contradicting each other e.g. Maui pipeline repair times. Even though there was no inconsistency in this exercise further refinement and development of supplementary processes is still necessary to ensure that statements are consistent / non-contradictory.</p> <p>It is understood that the media representatives of the TSOs have a work-stream which will continue to develop these processes, but a review of the Security of Supply notices procedure owned by the TSO operational staff is also required.</p>		
Item	Recommendation	Party
21	Review Security of Supply notices and Commercial Operator/Technical Operator communication processes to ensure support systems will work reliably to meet the requirement of the regulations and be consistent across the Technical/Commercial/CC Operators.	TSOs

## Appendix A – Exercise Interjects

### Interject 1

“Exercise Evolution.

This is the 1<sup>st</sup> exercise interject from Exercise Control.

Directional drilling by a utility company has struck the Maui pipeline immediately north of Frankley Rd, resulting in a loss of containment. Vector as TSO have determined that it is necessary to isolate to repair.

Pipeline is now in the process of being isolated from Frankley Rd to Tikorangi by field staff. The supply to Faull Rd and Waitara Valley DP is isolated at Waitara Valley offtake (Bertrand Rd). All Tikorangi area receipts can continue flow into the northern section of the system.

Return to service time is not yet known, but is expected to be several days.

Immediately before isolation Maui linepack was 270 TJ/s

All other system conditions and flows across the system were as actual conditions at 8:00am this morning

The weather forecast is for storms later today

Exercise Evolution”

### Interject 2

“Exercise Evolution.

This is the 2<sup>nd</sup> Interject from Exercise Control.

The Southern System is now in surplus by 12 TJ/s/hour. It is assumed the TSO has (or will) take action under VTC/MPOC operating procedures to manage this.

The northern system was, after the isolation, in deficit by 3TJ/s/hour, but this has now been dealt with by the curtailment and the system north of Tikorangi is back in balance. The Maui linepack north of Tikorangi is 192 TJ/s (73% of the whole Maui linepack). A flat 32 barg linepack for that section would be 145 TJ/s.

Pohokura gas field has just tripped. This is an unplanned outage, reason not as yet known. Return to service time is not yet known but is expected to be several hours. Receipts of 9TJ/hour (Ngatimaru Rd plus Tikorangi #2) have been lost, so the north system is back in deficit by 9TJ/hour.

Exercise Evolution”

### 14:00 Interject 3

“Exercise Evolution.

This is the 3<sup>rd</sup> Interject from Exercise Control.

Pohokura gas field has just started to flow gas. At this stage flow rates are low (approx. 1 TJ/hour) and could be unstable.

Exercise Evolution”

### 14:45 Interject 4

“Exercise Evolution.

This is the 4<sup>th</sup> Interject from Exercise Control.

Pohokura gas field receipts have increased to 9TJ/s/hour and have been stable for the last 45 mins.

Exercise Evolution”

## Appendix B – Exercise Timeline

### Exercise Control Log

Time	Actor	Activity
08:00	Exercise Control	Exercise commenced messages
08:15	Exercise Control	1 <sup>st</sup> Interject delivered
08:32	TSO	CCO received TSO alert from messaging system
08:35	CCO	Call to TSO – discussion of declaration re “other gas gates”. TSO will consider. Ross Dixon will be Duty CCO – cell phone nos exchanged Scada file requested
08:35	TSO	Security of Supply alert #1 sent to CCO
08:46	TSO	1 <sup>st</sup> Scada data file received by CCO (SCADA files were then regularly sent by TSO throughout exercise – further instances not repeated below).
08:58	CCO	Phone to TSO – could TSO confirm there is a breach of threshold? Sending draft notice Confirmed e-mail address to use
09:04	CCO	Draft declaration to TSO for comment
09:11	TSO	Declaration notice confirmed back to CCO, no changes
09:18	TSO	Confirmation e-mail re isolated valves
09:19	CCO	Phone to TSO – request for half hourly SCADA file Declaration going out now
09:20	CCO	Declaration Notice sent (website; e-mail; SMS; recorded message)
09:30	TSO	Declaration replicated on OATIS (MDL then Vector)
09:33	CCO	Call to Methanex – how has scenario affected their operation?
09:48	Methanex	Call back clarifying plant situation – all plant is off
09:58	CCO	E-mail request to TSO for diagram with valves and tags shown
10:00	CCO	Phone call with TSO re expectation of curtailment
10:08	CCO	Call to Transpower to advise of impending curtailment
10:15	TSO	Hand drawn diagram of valving received by CCO
10:18	CCO	Draft curtailment to TSO
10:22	CCO	Call to Greymouth – enquiry re gas supply availability
10:25	CCO	Call to TSO to confirm they are content with curtailment
10:28	TSO	E-mail agreement to CCO re estimate of survival time
10:34	TSO	Confirmation re curtailment, no changes advised
10:37	TSO	1 <sup>st</sup> Curtailment notice sent (website; e-mail; SMS; recorded message)
10:36	Exercise Control	2 <sup>nd</sup> interject delivered
10:40	TSO	Replicated direction to curtail on OATIS
10:57	Methanex	1 <sup>st</sup> large consumer update received. An analysis of large consumer and retailer updates is shown at appendix E, so no further mention will be

		shown in this timeline
10:58	Observer at TSO office	Call from observer to Exercise Control. TSO has missed step of communicating to CCO re Pohokura trip. Observer will prompt.
11:01	TSO	Call to CCO re Pohokura trip
11:09	TSO	Updated Security of Supply alert sent to CCO
11:10	CCO	Call to SENZL re Pohokura to discuss outage
11:15	CCO	Call to advise Transpower to expect revised curtailment
11:24	CCO	Draft revised curtailment to TSO
11:29	TSO	Confirms curtailment, no changes advised
11:33	SENZL	Media statement re Pohokura supplied
11:34	CCO	2 <sup>nd</sup> curtailment notice sent (website; e-mail; SMS; recorded message)
11:41	TSO	Replicated revised curtailment notice on OATIS
11:43	CCO	Phone TSO to highlight need for asset info on MDL pipeline
11:44	SENZL	Phone call to TSO requesting s15.2 MPOC curtailment of Ngatimaru Rd (Receipt) and providing further info re Pohokura outage
11:50	CCO	Phone Todd re alternative supply
11:55	TSO	Updated security of supply sent to CCO
11:57	Todd	Phone call to CCO – no spare capacity
12:05	CCO	Draft Status Update statement to TSO for comment
12:12	CCO	Call to TSO – re draft statement. OK?
12:18	TSO	Confirms Status Update, no changes advised
12:20	CCO	Status Update published (website; e-mail; SMS; recorded message)
12:28	TSO	Asset owner statement published (MDL pipeline)
12:31	TSO	Copy of MDL pipeline asset statement sent to CCO
12:42	TSO	Advises CCO of actions taken under MPOC/VTC (VTC curtailment of Kupe and MPOC curtailment of delivery points north of Frankley Rd)
12:46	TSO	Replicated CCO status update on OATIS
12:52	CCO	E-mail query to CCO re MPOC/VTC actions advised. How would curtailing delivery points help?
12:59	TSO	Reply e-mail that MPOC curtailment would have been of Oaonui (not delivery points)
14:00	Exercise Control	Interject 3 delivered
14:06	TSO	Advise CCO of signs of gas at Pohokura via Security of Supply alert
14:10	CCO	Phone call to SENZL re Pohokura
14:21	CCO	Phone call to Transpower – explore partial restoration options – Transpower preference for Southdown to receive available gas as they have quicker start-up
14:45	Exercise Control	Interject 4 – Pohokura at full rates and stable
14:50	TSO	Security of supply alert to CCO advising of Pohokura stability
14:50	CCO	Call to SENZL to confirm plant is stable

14:59	CCO	Draft partial restoration notice to TSO for review
15:05	TSO	Requested change to draft restoration notice, delete "s" in TSO. No other changes advised.
15:12	CCO	Partial restoration notice sent (website; e-mail; SMS; recorded message)
15:18	TSO	Replicated restoration notice on OATIS
15:33	CCO	Draft status update public statement to TSO for comment
15:38	TSO	Confirmed public statement, no changes
15:40	CCO	Send out status update (website; e-mail; SMS; recorded message)
15:48	TSO	CCO public statement update replicated on OATIS
15:51	Exercise Control	Exercise finished message - deliberately ended without CC event being terminated.

## Appendix C – Notice Summary

All CCO notices can be viewed in full on [www.cco.org.nz](http://www.cco.org.nz) – Historical Events

All Vector TSO notices can be viewed on [www.oatis.co.nz](http://www.oatis.co.nz) – Vector Information Exchange, using ‘Notice Search’ button and begin date of 25/6/14

All MDL TSO notices can be viewed on [www.oatis.co.nz](http://www.oatis.co.nz) – Maui Information Exchange using ‘Notice Search’ button and begin date of 25/6/14

### Notices to TSO

Time of e-mail to TSO	Notice ID	Notice Type	TSO replication	
			MDL	Vector
09:20	CC-0007	Critical Contingency Declaration Notice	09:30	09:35
10:37	CC-0008	Direction to Curtail Demand	10:40	10:46
11:34	CC-0009	Direction to Revise Demand Curtailment Notice	11:41	11:43
15:12	CC-0011	Direction to restore curtailed demand	15:18	15:21

### Public Information Notices

Posted	Notice ID	Notice Type
12:20	CC-0010	Status Update Notice
15:40	CC-0012	Status Update Notice

---

## Appendix D – Asset Owners Public Statements



### **“Exercise Evolution”**

12 midday, 25 June 2014

Draft media statement

Gas production from the Pohokura natural gas field stopped at approximately 10am this morning when adverse weather caused a failure of the electricity supply to the Pohokura Production Station, located north of New Plymouth.

The electricity provider is working to reinstate power to the Pohokura Production Station. As operator of the Pohokura field, Shell Exploration NZ limited (SENZL) are preparing to recommence production as soon as power is restored.

It is currently estimated that gas production from Pohokura will resume in approximately three hours.  
Iwan Bridge, Operations Manager, Shell Exploration NZ limited.

ENDS

## TEST EXERCISE “EVOLUTION”

Maui Development Limited – Maui Pipeline Event – Public Statement / Update:

<b>Report No:</b>	2014-06-25_11:44
<b>What has Happened?:</b>	<p><u>Maui Pipeline:</u> Directional drilling by a utility company has struck the Maui pipeline immediately north of Frankley Rd, resulting in a loss of containment. Vector as TSO has determined that it is necessary to isolate to repair.</p> <p><u>Pohokura Production Facility:</u> An unrelated event has caused the Pohokura Production Facility to trip. Adverse weather has caused a failure of the electricity supply to the Pohokura Production Station. The electricity provider is working to reinstate power to the Pohokura Production Station.</p>
<b>Actions Being Taken to Effect Repairs:</b>	<p>The TSO has isolated the affected section of the pipeline.</p> <p>The TSO has reconfigured the Vector transmission system to supply the Bay of Plenty area through Frankley Rd Offtake and the Vector 200 pipeline.</p>
<b>Estimation of the Likely Duration of each Step of the Repair Process:</b>	Unknown at this stage.
<b>Estimated Time of When the Maui Pipeline will be Returned to Service:</b>	Unknown at this stage.
<b>Will the Maui Pipeline be Temporarily Restored to a Reduced Level of Service?:</b>	Unknown at this stage.

- Further information on Maui Development Limited and the Maui Pipeline can be found on the Maui Pipeline website [www.mauipipeline.co.nz](http://www.mauipipeline.co.nz)
- The Critical Contingency Operator (Core Group) is also required to make regular public statements and updates, which will be posted on the CCO website [www.cco.org.nz](http://www.cco.org.nz)

## Appendix E – Analysis of Large Consumer and Retailer Updates

1 <sup>st</sup> curtailment issued at 10:37am – Large Consumers only affected – updates requested hourly			
Large Consumer	1 <sup>st</sup> Response received	Content of 1 <sup>st</sup> response	Subsequent update times
Methanex	10:57	<b>Gas Gate Compliance Update</b> Faull Rd                    0 scm/s & 0 GJ/hr Bertrand Rd                0 scm/s & 0 GJ/hr Ngatimaru Rd (Del)      0 scm/s & 0 GJ/hr	11:51 12:49 13:50 15:04 15:51
Ballance	10:59	Not affected	No further updates
Contact	11:00	<b>Gas Gate Compliance Update</b> Otahuhu B                0 GJ - was already off Te Rapa Cogen            0 GJ - was already off	12:03 12:57 14:02 15:01 15:30
Genesis	12:09	<b>Huntly PS</b> Provided detailed shutdown sequence for each unit	No further updates
MRP	Post exercise	<b>Southdown Power Station</b> Full curtailed at 11.15 am	No further updates

No update received from Mighty River Power as Large Consumer at Southdown Power Station during the exercise. Their update was submitted subsequently.

All Retailers responded to the information e-mail about the exercise. They all selected the “Facilitation” level of participation, with the exception of OnGas who selected “Partial”.

<b>2nd curtailment issued at 11:34am- Curtailed down to band 3 – updates requested hourly</b>			
<b>Retailer</b>	<b>1<sup>st</sup> Response received</b>	<b>Content of 1<sup>st</sup> response</b>	<b>Subsequent updates</b>
EDNZ	11:30	No customers in band 1+2	12:00 reported full compliance band 3 13:34 14:04 15:01 15:40 customers have been notified of resumption
Contact	12:03	Unable to contact all consumers yet, will provide further update once contact complete, template incomplete	12:57 Template supplied showing full compliance 14:02 15:01 15:30
Genesis	13:03	106 customers, full compliance	No further updates
Greymouth	12:14	Reported full compliance via e-mail (template to follow)	12:45 template supplied 12:59 amendment – no customers curtailed at Mangatainoka
OnGas	12:37	10 customers notified 3 curtailed	13:25 10 customers notified, 7 curtailed. Some customers can't be reached 13:43 all now complied
Mercury	12:02	No customers affected	13:52 14:59
Nova	12:35	Reported full compliance	No further updates

Trustpower – no customers affected and so no update provided

---

## Appendix F – Large Consumer Feedback and Retailer Self-Assessment Forms

**Feedback from Methanex** for improving the flow of information during a CC event based on learnings from Exercise Evolution:

1. Text messages should state the sender of the message as a header, the message received were not easily identifiable as being from CCO or TSO.
2. It would be more efficient for the TSO's e-mails to have relevant CCO notice as a pdf attachment rather than just providing a link to OATIS. In some cases a recipient will have the ability to open an attachment on a mobile phone immediately but may not be able to log on to OATIS straight away.
3. Given that the TSO notice is just a case of TSO distributing the CCO original notification we believe the TSO turnaround time should be faster than it was in some cases during the exercise.
4. The requirement for status updates to be provided every hour should be reviewed, particularly if information is not changing. A two-hourly update would be a more reasonable position during the initial stages, with reduced frequency advised once the situation has stabilised. We also note that the turnaround required for the first update was only 13 minutes after receipt of the TSO notice which in case of a real event would have been hard to effectively respond to within that time.

## Retailer Self-Assessment Forms

Retailer Name	<b>Mercury Energy</b>
Exercise Participation Level *delete as appropriate	Facilitation
1. Description of process in place to ensure consumer emergency contact details are maintained and up to date in accordance with regulation 43.	Customer contact details are updated with any customer contact or annually through an outbound calling programme.
2. How often are emergency contact numbers reviewed or audited for completeness and accuracy?	Annually
6. Description of methods, processes and procedures in place for issuing urgent notices in accordance with regulation 56.	Not applicable as we only have customers in Curtailment Band 6.
7. Description of methods, processes and procedures for advising affected consumers of termination of critical contingency in accordance with regulation 61(c).	Not applicable as we only have customers in Curtailment Band 6.
8. Views on levels of consumer understanding of your instructions and their obligation under regulation 57.	Not applicable as we only have customers in Curtailment Band 6.
9. Views on exercise format, lessons learnt and any planned future changes or initiatives you may take that were identified during the exercise.	<p>We have two questions with regards to providing information to the TSO on compliance with the CCO's instructions.</p> <p>If a retailer has no customers affected by the curtailment instructions do they need to provide compliance information to the TSO.</p> <p>Once full compliance with the CCO's instructions is completed do retailers need to continue to provide the same information to TSO.</p>

Retailer Name	<b>Genesis Energy</b>
Exercise Participation Level *delete as appropriate	Facilitation *
1. Description of process in place to ensure consumer emergency contact details are maintained and up to date in accordance with regulation 43.	Ran file from Gentrack on contact with customers this confirms the details are correct, we also sent out the industry letter to all non-domestic customers in March
2. How often are emergency contact numbers reviewed or audited for completeness and accuracy?	Initially when a customer joins us and on any switch transaction also as per regulation 44
6. Description of methods, processes and procedures in place for issuing urgent notices in accordance with regulation 56.	N/A
7. Description of methods, processes and procedures for advising affected consumers of termination of critical contingency in accordance with regulation 61(c).	N/A
8. Views on levels of consumer understanding of your instructions and their obligation under regulation 57.	N/A

9. Views on exercise format, lessons learnt and any

Once we were notified of the gas gates affected we downloaded from Oatis

Critical Contingency Management  
[Combined Large Consumer & Retailer Update Template](#)  
[Critical Contingency Management Plan 11 June 2014](#)

When we received the affected gas gate list from the CCO/TSO we found that some of the gas gates were not on the Oatis template.

We then downloaded the below from Core group web site and found all of the gas gates we needed. Discrepancy between consumer data templates

27/03/2014	Large Consumer Data Template	CCO-064 Large Consumer Data Template.xlsx
------------	------------------------------	---

We found with our own consumer data that we have a total of 763 customers on band 3. Effectively we only have 106 true band 3 customers we now need to make some registry changes to reflect true bands for customers

Retailer Name	<b>Trustpower</b> (EDNZ response will be separate)
Exercise Participation Level *delete as appropriate	Facilitation
1. Description of process in place to ensure consumer emergency contact details are maintained and up to date in accordance with regulation 43.	Fortnightly update of records, and letters and phone contact made to ensure customers allocated a curtailment band are up to date. A nightly process operates that updates the number of ICP's we have by gate and band to ensure we can quickly provide the CCO an update of our customer counts at each gate, and band.
2. How often are emergency contact numbers reviewed or audited for completeness and accuracy?	Monthly review for completeness, annual review to ensure accuracy, or when they switch in.
6. Description of methods, processes and procedures in place for issuing urgent notices in accordance with regulation 56.	Contact is made via email, and a phone call is made from their account manager to explain the situation, and what is required, under regulation 56. When a customer switches in, relevant information covering Critical Contingencies is provided, and possible penalties for non-compliance are outlined.
7. Description of methods, processes and procedures for advising affected consumers of termination of critical contingency in accordance with regulation 61(c).	Contact is made via email, and a phone call to ensure they are promptly informed of cessation of curtailment.
8. Views on levels of consumer understanding of your instructions and their obligation under regulation 57.	Moderate. Trustpower currently has very few customers that could be curtailed under a Critical Contingency.
9. Views on exercise format, lessons learnt and any planned future changes or initiatives you may take that were identified during the exercise.	Clear prompt communication was provided. As this is the first exercise that Trustpower has participated in, we believe that the exercise performed well, and provided us with sufficient information to clearly and promptly inform our customers of the situation. We have a robust process in place.

Retailer Name	<b>OnGas Limited (Vector)</b>
Exercise Participation Level *delete as appropriate	Partial
1. Description of process in place to ensure consumer emergency contact details are maintained and up to date in accordance with regulation 43.	Emergency contacts are maintained in our GIX database for each customer. The customers contact details are reviewed by the Account Managers and customers requested to update their details via the GIX. In addition, the Operational team review the details in the GIX to ensure there are emergency contacts.
2. How often are emergency contact numbers reviewed or audited for completeness and accuracy?	Monthly
6. Description of methods, processes and procedures in place for issuing urgent notices in accordance with regulation 56.	Customers were advised using our GIX system. Initially advised at 11am of the event. Affected customers that wished to be part of the exercise were advised to curtail at 11.50am via email and text messages. The bulletin they received instructed them to log on to the GIX and advise when they have shutdown. The CCO was advised by 2pm that all affected customers had curtailed.
7. Description of methods, processes and procedures for advising affected consumers of termination of critical contingency in accordance with regulation 61(c).	Affected customers were advised at 4.30pm via email and text messages that the event was terminated. They were encouraged to provide feedback via email.
8. Views on levels of consumer understanding of your instructions and their obligation under regulation 57.	The customers were happy with the instructions they received from OnGas (Vector). Several commented they needed to review their internal processes and improve their understanding of expectations. Our Account Mangers will be assisting them with this.
9. Views on exercise format, lessons learnt and any planned future changes or initiatives you may take that were identified during the exercise.	<p>We are planning to have a 'desktop' practice in October 2014 involving all of our customers. Customers have been advised of this via the GIX already and asked that they review their emergency contacts.</p> <p>An internal report is to be written by our Operational team detailing the event and opportunities for improvement. The SOP requires approximately 5 amendments as a result of the exercise.</p> <p>The TSO report via the GIX did not work during the</p>

practice and had to be exported to excel. This has now been fixed.

We will be developing templates for the messages published to the GIX to speed up the process for the Operational Analysts.

**Queries for TSO/CCO**

If all of our affected customers have complied with the instruction to curtail and this has been advised to the TSO is it necessary for us to continue to provide updates?

We were advised by Chris Bolton that the 12.20 (CC-0010) bulletin allowed us to bring our customer at KIN04310 back on line as the transmission system had been reconfigured. It would be clearer for us if the bulletin detailed which gates could be reinstated.

Retailer Name	<b>Energy Direct NZ Ltd</b>
Exercise Participation Level *delete as appropriate	Facilitation
1. Description of process in place to ensure consumer emergency contact details are maintained and up to date in accordance with regulation 43.	<p>As part of our application process, customers must provide contact details.</p> <p>All non domestic new connections and ICPs that have become active contracted with EDNZ are sent a letter about gas critical contingency management under regulation 44(2). This letter includes contact details confirmation form and reply envelope. The customer is asked to complete the form and return it to us.</p> <p>EDNZ enters these contact details into a Load Shedding Master file for all active non domestic consumer installations, which includes:</p> <ul style="list-style-type: none"> <li>• ICP</li> <li>• Address</li> <li>• Customer Number</li> <li>• Customer Name</li> <li>• Estimated Annual Load (GJ)</li> <li>• Load shedding category (curtailment band)</li> <li>• Date the customer last received notification under regulation 44</li> <li>• Customer postal address</li> <li>• Customer emergency contact details, including after business hours contacts</li> <li>• Customer’s preferred method for receiving information during critical contingency events</li> <li>• The date that the customer’s contact details were updated.</li> </ul> <p>The load shedding master file is compared to our billing system fortnightly to identify ICPs that are new, have changed to an active status or have changed between customers. Any customers added to the list are sent a notification under regulation 44(2) as described above.</p> <p>As part of this review we identify customers with missing contact details, or contact details that have not been updated recently, so that they can be followed up.</p>

<p>2. How often are emergency contact numbers reviewed or audited for completeness and accuracy?</p>	<p>All active non domestic customers were written to on 3 March 2014 and asked to confirm their contact details. New customers have been written to as they are identified fortnightly.</p> <p>As explained above we review our load shedding master file fortnightly and are working through updating any old or missing contact details.</p>
<p>6. Description of methods, processes and procedures in place for issuing urgent notices in accordance with regulation 56.</p>	<p>We telephone the emergency contact for our customer, and follow up with written confirmation of the instruction via fax or email.</p> <p>Depending on the number of customers affected, the outbound calls would be made by our Energy Trading Team of 6. If a large number of customers were affected, all staff apart from a handful of people to take inbound calls could be involved in outbound calling.</p> <p>We then provide regular updates to the customers who are curtailed, to advise of any progress or developments.</p>
<p>7. Description of methods, processes and procedures for advising affected consumers of termination of critical contingency in accordance with regulation 61(c).</p>	<p>As for 6, we contact them first by telephone and then follow up in writing either by email or fax.</p>
<p>8. Views on levels of consumer understanding of your instructions and their obligation under regulation 57.</p>	<p>All of our active non domestic customers receive a notification under regulation 44(2) which explains their obligations. For customers in group 4 and above we also discuss their obligations with them.</p>
<p>9. Views on exercise format, lessons learnt and any planned future changes or initiatives you may take that were identified during the exercise.</p>	<p>I think that the exercise went well, and the notices were clear.</p> <p>We did have a problem with not receiving notifications to our correct email groups. This has apparently been addressed with the email group <a href="mailto:energy.trading@ednz.co.nz">energy.trading@ednz.co.nz</a> being added.</p> <p><a href="mailto:CCO@cco.org.nz">CCO@cco.org.nz</a> were emailing PDF notifications to Debbie Anderson, who in turn forwarded to <a href="mailto:energy.trading@ednz.co.nz">energy.trading@ednz.co.nz</a> but I understand we normally wouldn't receive this email with the PDF attachment.</p> <p>The half hour delay between receiving the demand notification by email and the post being available to view on Vector's OATIS – (critical notices) was</p>

frustrating when we are trying to act as fast as possible. I understand Vector has half an hour timeframe to post these notifications.

I filled out the Retailer Compliance updates and emailed to [gas.controller@vector.co.nz](mailto:gas.controller@vector.co.nz); and [Critical.Compliance@vector.co.nz](mailto:Critical.Compliance@vector.co.nz) as instructed on the form. But these updates were also being forwarded onto [cco@cco.org.nz](mailto:cco@cco.org.nz) and myself, so I started to include CCO in my updates. Should CCO email address be added to the form?

We were happy with our load shedding plans; it was easy for us to determine which customers were affected. We had up to date contact details on file and in our billing system for all customers affected.

Retailer Name	<b>Greymouth Gas New Zealand Limited</b>
Exercise Participation Level *delete as appropriate	Facilitation
1. Description of process in place to ensure consumer emergency contact details are maintained and up to date in accordance with regulation 43.	Desktop review
2. How often are emergency contact numbers reviewed or audited for completeness and accuracy?	Periodic but at least annually
6. Description of methods, processes and procedures in place for issuing urgent notices in accordance with regulation 56.	An initial phone call to a contact person of each affected customer, accompanied by a follow-up email
7. Description of methods, processes and procedures for advising affected consumers of termination of critical contingency in accordance with regulation 61(c).	As above
8. Views on levels of consumer understanding of your instructions and their obligation under regulation 57.	Strong – in general. But in a live event, consumers’ understandings will reflect the clarity of the original CCO instructions issued down the chain.
9. Views on exercise format, lessons learnt and any planned future changes or initiatives you may take that were identified during the exercise.	Overall the event went smoothly, although the level of duplicate documentation was overwhelming at times. Also, had no-one been in the office during the event, then the timeliness of our participation would have been delayed (but still would have been in accordance with the regulations) due to the back-up person flying, driving and losing charge on a cell phone.

Retailer Name	<b>Contact Energy</b>
Exercise Participation Level *delete as appropriate	Full/ Partial / <del>Facilitation</del> * - desktop exercise only
1. Description of process in place to ensure consumer emergency contact details are maintained and up to date in accordance with regulation 43.	A report is run monthly to collate the gas emergency contact details by gas gate and by curtailment band. An exception is raised for any new consumers that join Contact and have a Curtailment Band other than 6 or DOM which goes to an Account Manager to obtain the required gas emergency contact details. Consumers in Band 6 have their contact details recorded via usual customer contact information.
2. How often are emergency contact numbers reviewed or audited for completeness and accuracy?	The emergency contact details are reviewed on an ad-hoc basis typically when there is customer interaction. A change in customer or in curtailment

	band will also trigger an exception to an Account Manager (for bands other than 6 or DOM) that will facilitate contact to the customer to confirm gas emergency contact details
6. Description of methods, processes and procedures in place for issuing urgent notices in accordance with regulation 56.	The relevant gas gate and curtailment bands as advised by the TSO are used to create contact lists for our Account Managers/Call Centre teams to advise the affected customers that they need to cease taking gas. A follow-up text message or e-mail is also be sent as confirmation of the call.
7. Description of methods, processes and procedures for advising affected consumers of termination of critical contingency in accordance with regulation 61(c).	We track the customers that have been notified and once the termination notice has been received we then make contact with the relevant consumers by phone and text/e-mail to advise that it is safe to resume taking gas.
8. Views on levels of consumer understanding of your instructions and their obligation under regulation 57.	As this was a desktop only exercise to test the functionality of our new system no customers were contacted.
9. Views on exercise format, lessons learnt and any planned future changes or initiatives you may take that were identified during the exercise.	<p>The format of the exercise was good and it was a good test for users in terms of familiarisation with our new system. In terms of information from the TSO there are some suggestions we would like to propose:</p> <ul style="list-style-type: none"> <li>- Including a reference number for the contingency event (eg EVOL-001) within the notice as well as the notice number which increment by one for each new notice. The notices received had Exercise Evolution as the header and inclusion of a reference number would improve tracking.</li> <li>- Although we only carried out a desktop exercise the request for a response within less than half an hour of the curtailment notice (CC-0009) being issued and request for an update of successful curtailment directions being given in less than half an hour was unrealistic in terms of getting a meaningful response particularly where such a large number of gates is affected.</li> <li>- The list of gates affected should also be sent as a text or Excel file with the notice rather than just as a PDF to allow recipients to easily load this into their systems should they choose to do so.</li> <li>- There seemed to be delays in the TSO notices being issued and the OATIS website being updated</li> <li>- The update sheet that is used for reporting back by gate should include the amount of</li> </ul>

---

	load applicable rather than just customer number information. The sheet should also have gas gate in the first column to allow retailers to easily carry out any data updates or data manipulation in Excel.
--	--