



## **Vector Gas Transmission**

# **Proposed Critical Contingency Management Plan**

**Prepared in accordance with the Gas Governance (Critical Contingency  
Management) Regulations 2008**

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Proposed

# 1. Introduction

## 1.1 Purpose

This proposed Critical Contingency Management Plan (CCMP) has been prepared by Vector Gas Limited (Vector) in compliance with its obligations as a Transmission System Owner (TSO) under the Gas Governance (Critical Contingency Management) Regulations 2008 (the Regulations).

The stated purpose of the Regulations is "to achieve the effective management of critical gas outages and other security of supply contingencies without compromising long-term security of supply" (Regulation 3).

All capitalised terms in this CCMP have the same meaning as those terms in the Regulations.

## 1.2 Scope

The content to be included in a CCMP is specified in Regulation 25 covering the following elements:

- (a) Information relating to the thresholds that will be used by the Critical Contingency Operator (CCO) to determine whether or not a Critical Contingency should be declared.
- (b) A description of the events which Vector considers may result in a breach of the thresholds.
- (c) Actions that Vector could take to remedy a breach of the thresholds.
- (d) A process based on schedule 2 of the Regulations outlining the manner in which curtailment and restoration arrangements will be implemented during a Critical Contingency.
- (e) A communications plan which includes a description of the types, mode, and timing of communications initiated and received by Vector before and during a Critical Contingency.
- (f) Contact details of suitably qualified personnel at Vector who will be responsible for receiving communications from the CCO and giving directions in accordance with the CCMP.
- (g) A description of the circumstances under which Vector may choose to restore supply to the Vector pipeline in an order different from that described in the curtailment arrangements specified in the Regulations including the reasons why changing this order would better achieve the purpose of the Regulations and objectives of the specified curtailment arrangements.
- (h) A process outlining the manner in which Critical Contingency imbalances will be calculated for each affected party.
- (i) A list of contact details for the parties specified in Regulation 25(i).
- (j) A description of how transmission system information referred to in Regulation 38 will be provided by Vector to the CCO.

- (k) Any other items appropriate to give effect to the purpose of the Regulations.

It is also a requirement that the CCMP is consistent with VTC arrangements.

The scope of the CCMP reflects the distinction between the roles of the CCO and the role of Vector as a TSO during a Critical Contingency. These roles are defined in the Regulations. Vector's role as a TSO during a Critical Contingency is to comply with the directions of the CCO. Based on these directions Vector must issue directions to retailers and large consumers in accordance with the Regulations, and in a manner consistent with this CCMP and the CCO communications plan.

### **1.3 Relationship with Vector Transmission Code**

The Regulations define the relationship between a TSO CCMP and its operating code as follows:

- Regulation 25(2) *"A proposed critical contingency management plan must be consistent with MPOC, VTC, or any other transmission system code except to the extent necessary to comply with these regulations."*
- Regulation 13(2) *"MPOC, VTC, and any other transmission system code must be read subject to these regulations."*
- Regulation 81(1) *"A payment under these regulations in relation to a contingency imbalance discharges in full any payment obligation or liability under MPOC, VTC, or any other transmission system code in respect of the same contingency imbalance."*
- Regulation 81(2) *"This regulation does not limit regulation 13(2) and (3)."*

### **1.4 Consultation**

The draft proposed version of this CCMP was submitted for consultation with those parties identified as being affected by the proposed plan. The initial Proposed CCMP Version 1.0 dated 25<sup>th</sup> February 2009 and this amended CCMP include revisions considered necessary resulting from analysis of the consultation submissions.

## 2. Pre-Critical Contingency

### 2.1 Potential Critical Contingency

The VTC sets out Vector's rights and obligations ahead of, and to some extent during, a Critical Contingency. Consistent with the VTC, if Vector suspects that an Emergency<sup>1</sup> will occur (and a curtailment or shutdown is necessary), it will give notice to Shippers as early as reasonably practicable prior to such curtailment or shutdown of Vector's intention to take such action.

If it is likely that such an Emergency may result in a breach of a threshold for the Vector pipeline then Vector will also inform the CCO by telephone and confirm the details in writing. Information will include details of the parts of the transmission affected and predictions on when the issue causing the potential Critical Contingency will be resolved.

When the issue causing the potential Critical Contingency situation has been resolved Vector will inform the CCO by telephone and confirm the details in writing.

### 2.2 Likely events that may cause threshold breaches and remedy actions

The following events may result in a breach of a Critical Contingency threshold:

- Loss or reduction of supply from a gas producer or interconnected pipeline.
- Loss or reduction in compression capacity.
- Pipeline defect causing temporary de-rating of pipeline.
- Pipeline defect or damage causing loss of containment.
- Main line valve malfunction causing isolation of downstream pipeline.
- Shippers taking more Gas than they have nominated to inject into the relevant Vector pipeline.

Comment [I1]: Table 4 S2.2

Comment [I2]: Table 3  
r25(1)(b)

Prior to any breach of a Critical Contingency threshold, each of these events will be dealt with in accordance with the VTC. Accordingly, remedial actions may include, where practicable, increasing the volume of gas taken from other injecting or interconnected parties (including through tendering for gas injection), maximising throughput through other compressors, curtailments and shutdowns.

The introduction of off-specification gas or loss/reduction in odorant injection are considered to be credible system threats. However it is unlikely that either of these events would give rise to a breach of a threshold limit. Vector employs a number of controls and monitoring procedures to protect against these types of events occurring and has plans and equipment available to deal with such events.

Comment [I3]: Table 3  
r25(1)(b)

Vector has comprehensive emergency response plans, which are activated by a variety of scenarios including physical damage or limitations to the system and unplanned supply interruptions. Vector operates a 24/7 Gas Operations Control Centre (GOCC) which is also used as an emergency control centre when emergency response plans are activated. Emergency response capability is tested and evaluated by either a trial exercise or training exercise on a regular basis.

<sup>1</sup> For the definition of Emergency refer to VTC.

Once a Critical Contingency has been declared by the CCO these remedial actions may continue to be taken, if appropriate, in combination with load curtailment instructions from the CCO.

Note that information relating to Critical Contingency thresholds is provided in section 5.

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### 3. Communications Plan

#### 3.1 Purpose and objective

The purpose of this communications plan is to describe the notices that Vector will issue to affected parties during a Critical Contingency event, the reciprocal communications and the timeframes under which those communications will take place.

This plan also contains the contact details for pipeline stakeholders who might be involved in a Critical Contingency event as well as the contact details of the Vector representative who will be responsible for communicating to the CCO.

The overriding objective of the plan is to meet the requirements of Regulations 25 (e), (f), (i), (j).

#### 3.2 Target audience

The target audience for communications under the CCMP is defined in Regulations 25 (e) and (i) and includes the following:

- Critical Contingency Operator
- Transmission System Owners
- Gas distributors
- Shippers
- Retailers
- Large Consumers
- Operators of gas storage facilities
- Operators of upstream gas production facilities
- Interconnected parties, retailers, and shippers who are trading across or utilising the relevant part of the transmission system

The operational contact details for these groups are contained and regularly updated in OATIS.

There is also a requirement for Vector to nominate a person who will be responsible for giving communications to the CCO under the Communications Plan and for giving directions in accordance with the CCMP (r25 (f)). The details for this person are provided in Appendix 6.

#### 3.3 Communication of notices

Vector intends to use the operational contact details contained in the 'Contact Details' screen of OATIS which includes the 'Operational Contact', 'Email Address', 'SMS' and 'Telephone Number' fields for the purpose of communicating notices.

All notices will be posted on OATIS. Written notification alerting affected parties of the existence of posted notices will be sent direct from OATIS using email and SMS text messages. The notice will be considered received by the recipient on the date and at the time it is first posted on OATIS.

Should it not be possible for an affected party to be set up in OATIS to view notices and/or receive notice alerts from OATIS, alternative systems for transmitting email and SMS text messages will be considered.

For ease of access all notices posted in OATIS will be available in the public domain.

**Comment [I4]:** Table 4 S3.2 – CCO will communicate with ESO

**Deleted:** Electricity system operator

**Deleted:** ¶  
Should the urgency of a particular situation mean that oral communication is required, Vector will initially issue the notice by telephone and then post written confirmation notices in OATIS and give alerts in writing as described above.¶

Vector will also communicate all notices to storage facilities and Large Consumers in curtailment bands 0, 1a and 1b by telephone.

If the notice functionality on OATIS is unavailable Vector will use standard PC applications to communicate written notices.

If the communication of notice alerts by SMS text message and email is unavailable via OATIS, Vector will utilise alternative SMS text messaging and email communication using standard PC applications.

In the event that standard PC applications are unavailable to Vector, Vector will communicate notices by telephone and provide written confirmation as soon as reasonably practicable afterwards. If land line and cell phone services are unavailable to Vector, Vector will use its satellite phone service to communicate notices by telephone.

**Comment [I5]:** Table 3 r25(1)(e)

### 3.4 Communications on declaration of Critical Contingency

This section describes the notices that will be issued during declaration of a Critical Contingency. A process flow chart is included in Appendix 1 illustrating the process for communications during a Critical Contingency declaration.

The CCO will issue notice of declaration to Vector in accordance with Regulation 49.

Vector will communicate by way of giving notice of the declaration to all parties listed in Appendix 4.

#### **Notice of Declaration of Critical Contingency**

As soon as reasonably practicable, after Vector has received notification from the CCO that a Critical Contingency has been declared Vector will send this notice to affected parties.

The purpose of this notification is to advise that the CCO has declared a Critical Contingency. The notice will give details of the areas of the transmission system that are affected, advice that CCO directions must be complied with and communications described in the communications plan have commenced.

**A proforma of this notice is included in Appendix 5.1.**

**Comment [I6]:** Own amendment to give time to sense check directives (ref 5.3) prior to issuing notice to affected parties. Also amended other notices.

**Deleted:** Immediately

### 3.5 Communications during a Critical Contingency

This section describes the notices that may be issued during a Critical Contingency. A process flow chart is included in Appendix 2 illustrating the process for communications during a Critical Contingency.

The CCO will issue notices and directives to Vector in accordance with Regulation 53.

Vector will communicate by way of giving notices to parties affected by the directives given by the CCO in relation to the Critical Contingency.

All notices will be sent to all parties listed in Appendix 4 regardless of whether or not they may be affected by a Critical Contingency. It will be the responsibility of these parties to determine what actions they may need to take as result of receiving a notice.

If at any time during or after a Critical Contingency Vector becomes aware of, or obtains information pertaining to, the non-compliance with directives to curtail demand, revise demand curtailment or restore demand, it may inform the CCO. Vector will provide this information to the CCO in writing.

#### **Notice of Direction to Curtail Demand Communication**

As soon as reasonably practicable, after Vector has received notice from the CCO giving a direction to curtail demand Vector will send this notice to affected parties.

**Deleted:** Immediately

The purpose of this notice is to give directions in accordance with the directive issued by the CCO to curtail load to stabilise the affected parts of the transmission system. The directive will be in accordance with the curtailment bands in section 5. The notice may contain directions to curtail subsets of load within a curtailment band or subsets of geographically located load within a curtailment band.

Retailers and Large Consumers will be requested to give regular updates by issuing notices to Vector on their compliance with the direction.

**A proforma of this notice is included in Appendix 5.2.**

#### **Notice of Direction to Revise Demand Curtailment Communication**

As soon as reasonably practicable, after Vector has received notice from the CCO giving a direction to revise curtailed demand Vector will send this notice to affected parties.

**Deleted:** Immediately

The purpose of this notice is to give directions in accordance with the directive issued by the CCO to revise load curtailment for the purpose of further stabilising the transmission system. The directive will be in accordance with the curtailment bands in section 5. The notice may contain directions to curtail subsets of load within a curtailment band or subsets of geographically located load within a curtailment band.

For the avoidance of doubt this notice supersedes the original Notice of Direction to Curtail Demand and any previous notice(s) of Direction to Revise Demand Curtailment. It includes all demand previously directed for curtailment and all additional demands that now require curtailment.

**Comment [I7]:** clarification

Retailers and Large Consumers will be requested to give regular updates to Vector on their compliance with the direction.

**A proforma of this notice is included in Appendix 5.3.**

#### Notice of Direction to Restore Demand Communication

As soon as reasonably practicable, after Vector has received notice from the CCO giving direction to restore demand Vector will send this notice to affected parties.

Deleted: Immediately

The purpose of this notice is to give directions in accordance with the directive issued by the CCO. The CCO will have determined that the transmission system has stabilised to the extent that demand can be restored. Demand restoration will normally occur in the reverse order in which it was curtailed. However, the notice may contain directions to restore demand in an alternative order. The notice may also contain directions to restore demand in accordance with the requirements of CDEM legislation.

For the avoidance of doubt this notice supersedes any previous notice(s) of Direction to Restore Demand. It includes all demand previously directed for restoration and any additional demands that can now be restored.

Comment [I8]: Own clarification

The notice will also contain guidance for Retailers to follow gas distributors instructions when restoration notices are issued in the interests of restoring demand in an orderly and safe manner.

Shippers and Large Consumers will be requested to give regular updates to Vector on their compliance with the direction.

**A proforma of this notice is included in Appendix 5.4.**

In addition to communications received by Vector from the CCO during a Critical Contingency, Vector will receive regular communications from affected parties. These will most likely be in the form of regular updates from Large Consumers and Retailers giving details about their compliance with Vector directions during a Critical Contingency in accordance with Regulation 55. Vector will provide information on compliance updates to the CCO if requested.

Comment [I9]: Table 4 S3.5 and Table 3 r55(2)

#### Notice of Retailer & Large Consumer Compliance Update

Retailers and Large Consumers must follow directions for curtailment, revised curtailment and restoration of demand and provide Vector with regular updates of compliance in accordance with Regulation 55.

Updates on compliance are required at hourly intervals or at times agreed with Vector from the time a notice has been issued.

Comment [I10]: Table 2 r25(1)(e)

**A proforma of this notice is included in Appendix 5.5.**

### 3.6 Communications at the termination of a Critical Contingency

A process flow chart is included in Appendix 3 illustrating the process for communications during a Critical Contingency termination.

The CCO will issue notice of termination to Vector in accordance with Regulation 61. Vector will communicate by way of giving notice of the termination to all parties listed in Appendix 4.

#### Notice of Termination of Critical Contingency

As soon as reasonably practicable, after Vector has received notice from the CCO that a Critical Contingency has been terminated Vector will issue this notice.

Deleted: Immediately

The purpose of this notification is to advise that the CCO has determined that the Critical Contingency has been terminated. The notice will contain details on the time and date that the Critical Contingency terminated.

**A proforma of this notice is included in Appendix 5.6.**

## 4. Information requirements

### 4.1 General

The information which Vector is required to provide to the CCO is described in Regulation 38 as follows:

- (a) Metering (or other equipment) data on the amount of gas received in to or taken from, and the pressure at or near, an interconnection point.
- (b) In respect of each day, the net quantity of gas agreed between Vector and an inter-connected party, or otherwise expected or requested, to pass through each interconnection point.
- (c) Data concerning the composition and quality of gas in its parts of the transmission system.
- (d) Technical pipeline information referred to in clause 1 of Part 5 of Schedule 1 of the Gas (Information Disclosure) Regulations 1997.
- (e) Any notices issued pursuant to a transmission system code by Vector in respect to Maui Pipeline.
- (f) Any of the following data that Vector has access to and is reasonably requested (for the purpose of performing its obligations under these regulations) by the CCO:
  - (i) mismatch or operational imbalance data.
  - (ii) historical flow information, linepack, or pressure data.

The CCO will have access to information contained in the Vector OATIS and SCADA systems. Any additional information not readily available, which may be required by the CCO under Regulation 38 (f) will be requested in writing by the CCO.

### 4.2 Information systems

The CCO will be granted an appropriate level of access to the OATIS and SCADA systems to allow visibility of system conditions.

### 4.3 Operational pipeline data to be provided to CCO

Vector will provide information to the CCO to assist in the determination and declaration of a Critical Contingency, the management/monitoring during the Critical Contingency and the determination to terminate the Critical Contingency. The information provided may include all or some of the following:

- (a) Interconnection point data including pressure and volumes of gas received.
- (b) Injecting production station data including pressure and volumes gas being injected.
- (c) Gas quality data from the injecting production stations in (b).

- |
- (d) Scheduled, and nominated quantities of gas to be received into system from (a) and (b).
  - (e) Expected quantities and levels of system imbalance.
  - (f) Rate of change of imbalance.
  - (g) Expected time to reach the  $P_{\min}$  Critical Contingency threshold.
  - (h) Parts of the transmission affected.
  - (i) Historical flow, line pack and pressure data.
  - (j) Technical pipeline and equipment information.
  - (k) Performance and status of load shedding.
  - (l) Progress and status of event that triggered the Critical Contingency.
  - (m) Expected time until termination criteria are reached.
  - (n) Recovery of line pack, pressure levels.
  - (o) Security of any supplies reinstated from Producers.
  - (p) Reinstatement of the nominations and scheduling processes.
  - (q) Expected gas demands upon termination of Critical Contingency.
  - (r) Historical flow rates, line pack and pressure data.

## 5. Intra-Critical Contingency processes

### 5.1 Safety statement

If Vector deems that compliance with any part of the Regulations or any direction issued by the CCO (or any other party) in pursuance of the Regulations would endanger the life or safety of any person then Vector may elect not to comply and/or take alternative actions deemed to be appropriate under the prevailing circumstances.

Should Vector elect to not comply with the Regulations on the grounds of safety and to take alternative actions it will inform the CCO and any other affected parties. Information will be communicated by telephone and confirmed in writing giving reasons for electing to not comply and details of any appropriate alternative actions.

### 5.2 Pipeline thresholds

The Critical Contingency thresholds for the Vector pipeline are measured at the points in Table 1. The thresholds themselves are expressed both as a minimum pressure threshold ( $P_{min}$ ) and in terms of the time remaining to reach  $P_{min}$ . The time thresholds are based on the need to allow sufficient time for load curtailment directives to be issued and complied with by the affected consumers in the selected curtailment bands during a Critical Contingency.

The pressure thresholds are selected to ensure that connected gas distribution networks continue to be supplied with gas in sufficient quantities to prevent pressure falling to dangerous or unsustainable levels and to continue to supply gas in sufficient quantities to domestic consumers and essential service providers.

**Table 1 pipeline thresholds**

Pipeline Name	Point Of Measurement	Pmin (barg)	Threshold Time (Hours to reach Pmin)
South	Waitangirua	37.0	10
Hawkes Bay Lateral	Hastings	32.0	5
Frankley Road to KGTP	KGTP	37.5	4
Bay Of Plenty	Gisbourne	32.0	5
Bay Of Plenty	Taupo	32.0	5
Bay Of Plenty	Tauranga	32.0	6
Bay Of Plenty	Whakatane	32.0	5
Morrinsville Lateral	Cambridge	32.0	5
Central (North)	Westfield	42.0	6
North	Whangarei	25.0	6

In the event of pipeline damage or other major physical asset failure threshold time to reach  $P_{min}$  may be significantly shorter than the times indicated in the above table.

### 5.3 Curtailment arrangements

During a Critical Contingency Vector will receive and follow the directions given by the CCO as specified under Regulations 50 and 54.

The CCO is responsible for ensuring its directions (including any curtailment directions) meet the objectives set out in Schedule 2 to the Regulations. Vector's arrangements as described in this plan, have been designed to complement CCO directions and are consistent with these objectives.

If Vector believes any CCO issued curtailment direction is inconsistent with the objectives set out in Schedule 2 to the Regulations, it will immediately contact the CCO by telephone to discuss the issue.

Vector will issue notices to all parties listed in Appendix 4 as soon as reasonably practicable following receipt of directions from the CCO as described in section 3.

**Comment [I11]:** Table 2 r25(1)(d)

The curtailment bands are provided below in Table 2.

**Deleted:** During a Critical Contingency Vector will receive and follow the directions given by the CCO as specified under Regulations 50 and 54. These communications may include directions given to Vector by the CCO to implement the curtailment arrangements specified in schedule 2 of the Regulations.

**Table 2 curtailment bands**

Curtailment band	Consumption in terajoules (TJ)	Description
0	N/A	Gas off taken for injection into gas storage.
1a	More than 15TJ per day	Consumers (excluding essential service providers) supplied directly from the transmission system who have an alternative fuel capability. If minimal load consumer then manage wind-down of plant.
1b	More than 15TJ per day	Consumers (excluding essential service providers) supplied directly from the transmission system who do not have an alternative fuel capability. If minimal load consumer then manage wind-down of plant.
2	More than 10TJ per annum and up to 15TJ per day	Consumers (excluding essential service providers) with alternative fuel capability. If minimal load consumer then manage wind-down of plant.
3	More than 10TJ per annum and up to 15TJ per day	Consumers (excluding essential service providers) without alternative fuel capability. If minimal load consumer then manage wind-down of plant.
4	More than 2TJ per annum and up to 10TJ per annum	Consumers, excluding essential service providers. Minimal load consumers in curtailment bands 1a to 3 curtailed in full.
5	More than 2TJ per annum	Essential service providers.
6	2TJ or less per annum	All remaining consumers.

The CCO will issue demand curtailment directives to Vector who will then issue directions based on the CCO directive as described in section 3 to the parties listed in Appendix 4.

**Comment [I12]:** Table 3 r25(1)(g)

CCO curtailment notices may contain directions to curtail subsets of load within a curtailment band or subsets of geographically located load within a curtailment band. Vector will assess these directives and suggest to the CCO any alternatives it feels would better serve the purpose of the Regulations.

**Deleted:** CCO curtailment directives issued to Vector, and the details of parties that could be affected by curtailment during a Critical Contingency event are described in section 3.

#### 5.4 Normal demand restoration arrangements

Curtailed demand will normally be restored in the reverse order in which it was curtailed i.e. last to be curtailed is first to be restored.

The CCO will issue demand restoration directions to Vector who will then issue directions to the parties listed in Appendix 4 as described in section 3.

**Comment [I13]:** Own amendment for clarification – ref r25(1)(d)

If Vector believes any CCO issued restoration direction is inconsistent with the objectives set out in Schedule 2 to the Regulations, it will immediately contact the CCO by telephone to discuss the issue.

During demand restoration Vector will monitor the transmission system stability and capacity. Should the system be adversely affected Vector will contact the CCO immediately by telephone and discuss suggested actions to rectify the situation. Suggestions may include requirements for modifications to existing restoration directives or delays in issuing further restoration directives.

**Comment [I14]:** Table 3  
r25(1)(d)

### 5.5 Alternative demand restoration arrangements

Curtailed demand will normally be restored in the reverse order in which it was curtailed i.e. last to be curtailed is first to be restored.

However, Vector will ensure that restoration of supply occurs in such a manner that prevents any further threat to safety or system security. Economic and social considerations will also be taken into account. The following factors will be considered when determining if load should be restored in a different order to the reverse curtailment order;

- (a) The current level of curtailment.
- (b) Which consumers have been affected.
- (c) Current and forecast demand conditions.
- (d) Current supply availability and whether or not those supplies are sustainable.
- (e) Available quantities of linepack.
- (f) Availability and use of storage gas.
- (g) Maximisation of gas availability.

Restoration order will be based on following priorities (highest to lowest priority order):

- (a) Health and safety of employees, service providers and the public.
- (b) Minimisation of integrity risks of gas transmission and distribution networks and to customer appliances.
- (c) Any directions issued as a result of a Civil Defence Emergency.
- (d) Restoration of supply of gas to essential service providers.
- (e) Minimisation of physical damage to key industries and plant.
- (f) Allowance for minimal load consumer supplies.
- (g) Retailer/consumer contractual rights to gas supplies.

Vector and the CCO will consider these factors and priorities prior to the CCO issuing directions to restore demand.

If Vector considers that curtailed demand should be restored in an order different to the normal restoration order it will inform the CCO by telephone and confirm the details in writing.

Following consultation between the Vector and the CCO, the CCO will issue demand restoration directives to Vector who will then issue directions based on the CCO directive as described in Section 3 to the parties listed in Appendix 4.

**Comment [I15]:** Table 3  
r25(1)(g)

Some circumstances where alternative demand restoration arrangements which meet the objectives in Schedule 2 Part 1 are described below.

- (a) Partial restoration of consumers in curtailment bands 1a, 1b and 2 ahead of, or at the same time as consumers in bands 3 - 6. This would allow large consumers to make preliminary preparations for a return to full production (for example performing a "cold start" on large plant). The individual circumstances and requirements of each large consumer would be considered by Vector in conjunction with the CCO.
- (b) Full or partial restoration to electricity generation facilities classified as large consumers ahead of curtailment bands 2 - 6. This may be required in circumstances where the Electricity System Operator requests support from gas fired generation facilities to prevent widespread electricity outages. The decision to use this alternative restoration approach would be made in conjunction with the CCO, the Electricity System Operator, and CDEM.
- (c) Consumers in bands 0, 1a, 1b, and 2 being restored ahead of consumers in bands 3 - 6. This could occur where technical and operational issues have resulted in a longer term outage on a discreet section of the pipeline located downstream from the main gas supply, leaving some parties unaffected by the outage. The decision to use this alternative restoration approach would be made in conjunction with the CCO.
- (d) In the event of non-specification gas having entered the system, demand to consumers in bands 0, 1a, 1b and 2 may be restored ahead of bands 3 - 6 if the non-specification gas can be consumed safely and efficiently by these consumers. In these circumstances venting of large quantities of non-specification may be avoided.

**Comment [I16]:** Table 2  
r25(1)(g)

## 6. Imbalance section

Note: Whilst Vector understands the high level detail of MDL's approach to imbalance calculation under the Regulations, the precise detail remains unclear as at the date of the submission of this proposed CCMP. MDL's approach affects Vector's methodology and accordingly this section cannot be completed until information is forthcoming from MDL.

### 6.1 Contingency Imbalance Quantity and Value Information

[As noted in the proposed draft CCMP, this section requires GIC and industry discussion before it can be completed. As at the date of the submission of this proposed CCMP and as a consequence of industry discussion, Vector believes that there is agreement with the GIC and industry participants that contingency imbalances will be calculated for Vector and for shippers on the Vector system, but not for non-MDL interconnected parties. Vector will continue to work with the GIC and the industry (including MDL) to finalise the contingency imbalance calculation methodology, VTC and other contract amendments and to submit a further proposed CCMP as soon as reasonably practicable.]

Once each critical contingency imbalance quantity has been determined, and Vector has been provided with the applicable critical contingency imbalance price, Vector will calculate the respective values and provide both amounts to the GIC in accordance with the Regulations.

### 6.2 Contingency Imbalance Calculation Period

Contingency Imbalances will be calculated on a daily basis until such time as a move to sub-daily is feasible.

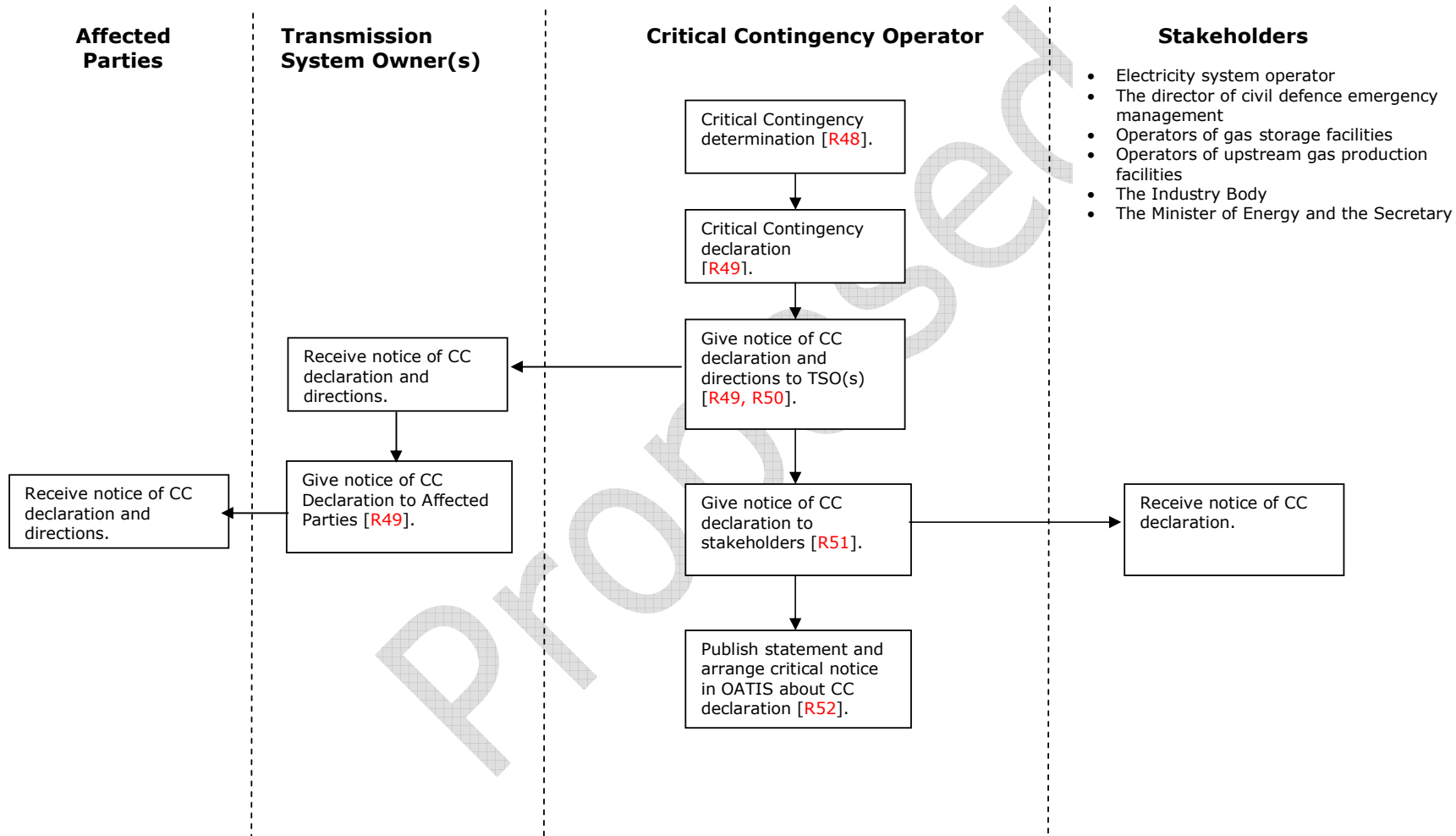
Sub-daily calculations are currently not possible on Vector's pipelines because they would require downstream allocation at an hourly level, which currently does not occur. If the industry is able to agree on, and fund, an hourly data regime then Vector believes it would be in a position to calculate contingency imbalances on a sub-daily basis and hopes that this will occur over the next 6 to 9 months.

|

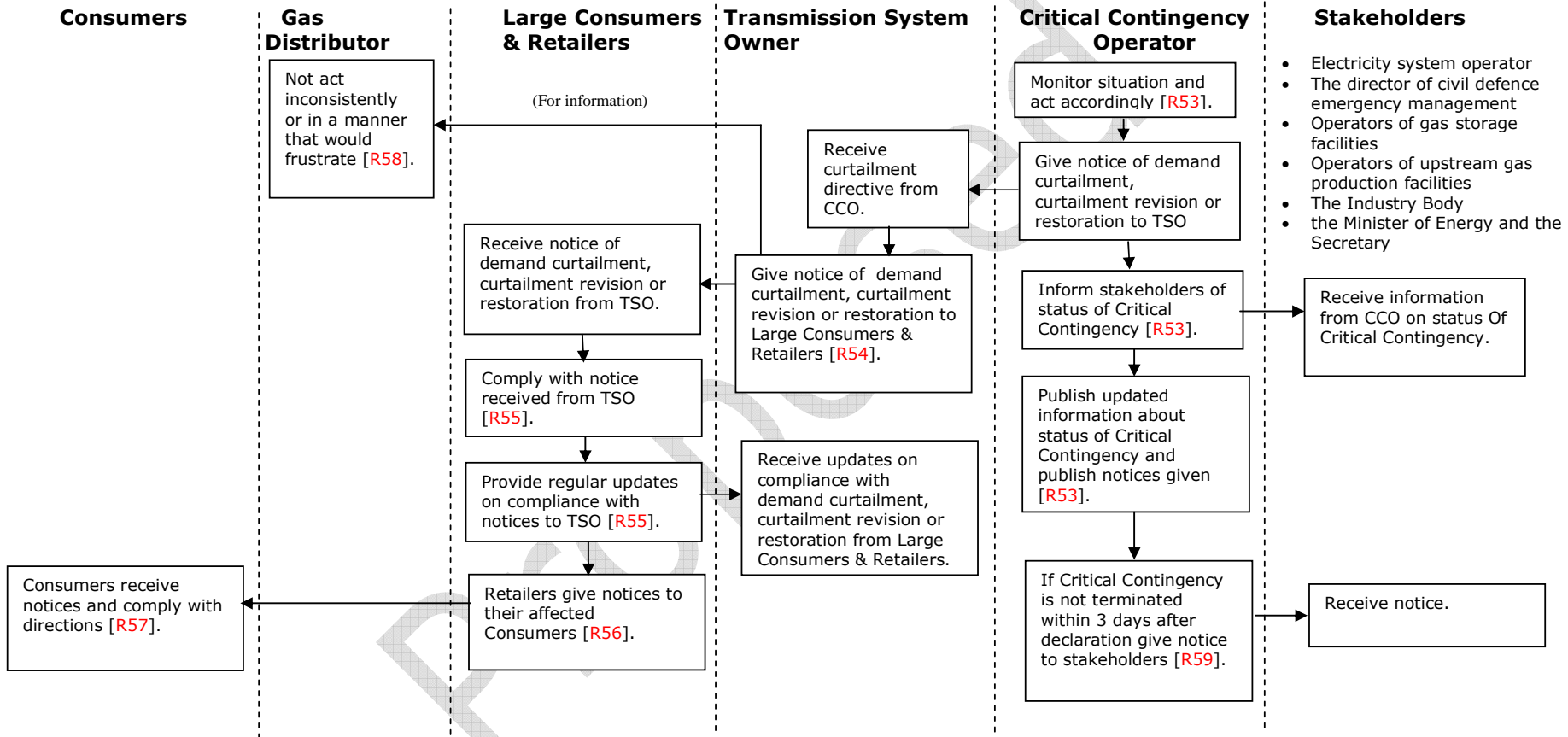
## 7. CCMP Appendices

Proposed

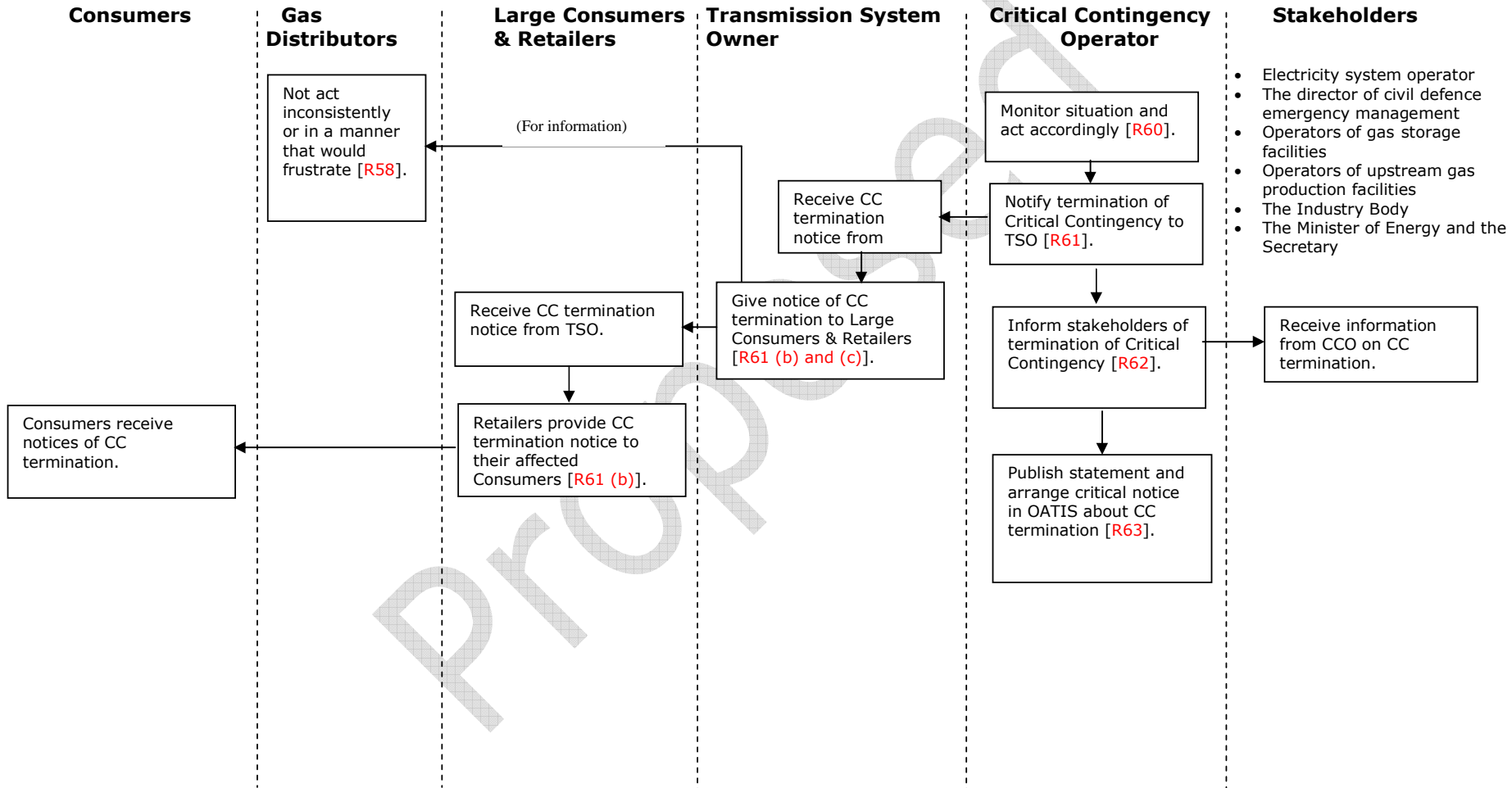
## Appendix 1 Process for declaration of Critical Contingency



## Appendix 2 Process during a Critical Contingency



### Appendix 3 Process for termination of Critical Contingency



## Appendix 4 Contact details

**Comment [I17]:** Table 2 r25(1)(i) and Table 4 A4

Contact details for affected parties are contained and updated within OATIS. It is the responsibility of the identified affected parties to maintain and keep up to date contact details in OATIS.

**Comment [I18]:** Own amendment to clarify responsibility

An updated OATIS contacts report is generated every day and these reports are stored outside of OATIS. In the event that OATIS is unavailable during a Critical Contingency the most recent contacts report will be used.

**Comment [I19]:** clarification

Contact details for these parties will be updated using existing OATIS processes. These parties include the following.

Category	Individual Organisations
Transmission System Owners	<ul style="list-style-type: none"> <li>Maui Developments Limited</li> </ul>
Gas Distributors	<ul style="list-style-type: none"> <li>Vector</li> <li>Powerco</li> <li>Nova Gas</li> <li>Gasnet</li> </ul>
Shippers	<ul style="list-style-type: none"> <li>Contact Energy Limited</li> <li>E-Gas 2000 Limited</li> <li>Genesis Power Limited</li> <li>Greymouth Gas New Zealand Limited</li> <li>Mighty River Power Limited</li> <li>Nova Gas Limited</li> <li>On Gas Limited</li> <li>Shell New Zealand Limited</li> <li>Vector Gas Contracts Limited</li> <li>Wanganui Gas Limited</li> </ul>
Retailers	<ul style="list-style-type: none"> <li>Contact Energy</li> <li>Genesis Energy</li> <li>Wanganui Gas</li> <li>Energy Direct</li> <li>Mercury Energy</li> <li>Auckland Gas Company</li> <li>Nova Gas</li> <li>Bay of Plenty Energy</li> <li>On Gas</li> <li>Vector Gas Contracts</li> <li>Greymouth Gas New Zealand Limited</li> </ul>
Gas Producers	<ul style="list-style-type: none"> <li>Vector Wholesale - Kapuni Gas Treatment Plant</li> <li>Greymouth Gas New Zealand Limited - Kaimiro Production Station</li> <li>Origin Energy - Rimu Production Station</li> <li>Origin Energy - Waihapa Production Station</li> </ul>
Storage Facilities	<ul style="list-style-type: none"> <li>Contact Energy Limited - Ahuroa Storage Facility</li> </ul>
Large Consumers	<ul style="list-style-type: none"> <li>Mighty River Power Limited - Southdown Power Station</li> <li>Contact Energy Limited - Otahuhu Power Station</li> <li>Contact Energy Limited - Stratford Power Station</li> <li>Ballance Agri-Nutrients (Kapuni) Limited</li> <li>Fonterra - Te Rapa Dairy Factory</li> </ul>

## Appendix 5 Proforma notices

### A5.1 Declaration of Critical Contingency

**Comment [I20]:** Table 4 A5.1 and Table 4 A5.1-5.4

#### Notice of Declaration of Critical Contingency

This notice is issued in accordance with the Vector CCMP. The CCO declared a critical contingency at [time] [date] under **Regulation 49** of the Gas Governance (Critical Contingency Management) Regulations 2008.

It is advised that all directions issued by the Critical Contingency Operator pursuant to the declaration of the critical contingency must be complied with.

The communications described in the CCO Communication Plan and Vector CCMP are now activated.

Load curtailment is not required at this stage and instructions are awaited from the CCO.

- 1. Event causing Critical Contingency**
  
- 2. Areas of transmission system affected**
  
- 3. Summary of actions being taken to resolve event**

#### Notes:

- (a) This notice will be considered received by the recipient on the date and at the time it is first posted on OATIS.
- (b) Alerts regarding this notice will also be communicated by email and SMS text message.

### Notice of Direction To Curtail Demand

This notice is issued in accordance with the Vector CCMP. The CCO gave direction to curtail demand at [time] [date] under **Regulation 53 (1) (d) (i)** of the Gas Governance (Critical Contingency Management) Regulations 2008.

It is advised that all directions issued by the Critical Contingency Operator pursuant to the declaration of the critical contingency must be complied with.

Retailers and Large Consumers must comply with this direction as soon as reasonably practicable and provide Vector with updates on compliance in accordance with Regulation 55 at hourly intervals or at agreed times from the time this notice was issued. Updates to be communicated to Vector at the contact details in Appendix 6 using the proforma notice included in Appendix A5.5.

The communications described in the CCO Communication Plan and Vector CCMP continue to be activated.

- 1. Event causing Critical Contingency**
  
- 2. Areas of transmission system affected**
  
- 3. Summary of actions being taken to resolve event**
  
- 4. Curtailments now directed**

Curtailment band	Description of consumers to be curtailed	Location of customers to be curtailed
0		
1a		
1b		
2		
3		
4		
5		
6		

**Notes:**

- (a) The notice will be considered received by the recipient on the date and at the time it is first posted on OATIS.
  
- (b) Alerts regarding this notice will also be communicated by email and SMS text message.

### A5.3 Direction to revise demand curtailment

**Comment [I22]:** Table 4 A5.1 and Table 4 A5.1-5.4 and Table 3 r25(1)(d)

#### Notice of Direction to Revise Demand Curtailment

This notice is issued in accordance with the Vector CCMP. The CCO gave direction to revise demand curtailment at [time] [date] under **Regulation 53 (1) (d) (ii)** of the Gas Governance (Critical Contingency Management) Regulations 2008.

For the avoidance of doubt this notice supersedes the original Notice of Direction to Curtail Demand and any previous notice(s) of Direction to Revise Demand Curtailment. It includes all demand previously directed for curtailment and all additional demands that now require curtailment.

It is advised that all directions issued by the Critical Contingency Operator pursuant to the declaration of the Critical contingency must be complied with.

Retailers and Large Consumers must comply with this direction as soon as reasonably practicable and provide Vector with updates on compliance in accordance with Regulation 55 at hourly intervals or at agreed times from the time this notice was issued. Updates to be communicated to Vector at the contact details in Appendix 6 using the proforma notice included in Appendix A5.5.

The communications described in the CCO Communication Plan and Vector CCMP continue to be activated.

- 1. Event causing Critical contingency**
- 2. Areas of transmission system affected**
- 3. Summary of actions being taken to resolve event**
- 4. Revisions to curtailments now directed**

<b>Curtailment band</b>	<b>Description of consumers to be curtailed</b>	<b>Location of customers to be curtailed</b>
0		
1a		
1b		
2		
3		
4		
5		
6		

**Notes:**

- (a) The notice will be considered received by the recipient on the date and at the time it is first posted on OATIS.
- (b) Alerts regarding this notice will also be communicated by email and SMS text message.

## A5.4 Direction to Restore Demand

**Comment [I23]:** Table 4 A5.1, Table 4 A5.1-5.4, Table 3 r25(1)(d), Table 3 r25(1)(g) and own clarification

### Notice of Direction to Restore Demand

This notice is issued in accordance with the Vector CCMP. The CCO gave direction to restore demand at [time] [date] under **Regulation 53 (1) (e) (i)** of the Gas Governance (Critical Contingency Management) Regulations 2008.

For the avoidance of doubt this notice supersedes any previous notice(s) of Direction to Restore Demand. It includes all demand previously directed for restoration and any additional demands that can now be restored.

It is advised that all directions issued by the Critical Contingency Operator pursuant to the declaration of the critical contingency must be complied with.

Retailers and Large Consumers must comply with this direction as soon as reasonably practicable and provide Vector with updates on compliance in accordance with Regulation 55 at hourly intervals or at agreed times from the time this notice was issued. Updates to be communicated to Vector at the contact details in Appendix 6 using the proforma notice included in Appendix A5.5.

Retailers must follow any instructions given by gas distributors with regard to demand restoration.

The communications described in the CCO Communication Plan and Vector CCMP continue to be activated.

- 1. Event causing Critical contingency**
- 2. Areas of transmission system affected**
- 3. Summary of actions being taken to resolve event**
- 4. Demand restoration now directed**

<b>Curtailment band</b>	<b>Description of consumers to be restored</b>	<b>Location of customers to be restored</b>
0		
1a		
1b		
2		
3		
4		
5		
6		

#### **5. Details regarding order for restoration of demand**

##### **Notes:**

- (a) The notice will be considered received by the recipient on the date and at the time it is first posted on OATIS.
- (b) Alerts regarding this notice will also be communicated by email and SMS text message.

### Retailer & Large Consumer Compliance Update

Retailers and Large Consumers must follow directions for curtailment, revised curtailment and restoration of demand and provide Vector with regular updates of compliance in accordance with Regulation 55.

Updates to be communicated to Vector at the contact details in Appendix 6 using this proforma at hourly intervals or at agreed times following the issue of the relevant notice.

Name of organisation	
Large Consumer or Retailer	Large Consumer / Retailer *
Type of notice update provided for	Curtailment / Curtailment Revision / Restoration *
Reference Number of Notice Compliance Being Updated On	

Curtailment band	Description of consumers curtailed/restored*	Location of customers curtailed/restored*	Compliance update details i.e. magnitude and time curtailed/restored*
0			
1a			
1b			
2			
3			
4			
5			
6			

\* delete as appropriate

## A5.6 Notification that Critical Contingency has Terminated

**Comment [I25]:** Table 4 A5.1, Table 4 A5.1-5.4, Table 3 r25(1)(d) and Table 4 A5.6

### Notice of Termination of Critical Contingency

This notice is issued in accordance with the Vector CCMP. The CCO terminated the Critical Contingency at [time] [date] under **Regulation 61** of the Gas Governance (Critical Contingency Management) Regulations 2008.

It is advised that all directions issued by the Critical Contingency Operator pursuant to the declaration of the Critical Contingency must be complied with.

Under Regulation 61 (b) Retailers are directed to advise their consumers that the CC has been terminated. Retailers must comply with this direction as soon as reasonably practicable.

Retailers must continue to follow any instructions given by gas distributors with regard to demand restoration.

The communications described in the CCO Communication Plan and Vector CCMP are deactivated at the time and date that the Critical Contingency is terminated.

- 1. Time and date Critical Contingency terminated**
- 2. Event that caused Critical Contingency**
- 3. Areas of transmission system affected**
- 4. Details of event resolution**

#### Notes:

- (a) The notice will be considered received by the recipient on the date and at the time it is first posted on OATIS.
- (b) Alerts regarding this notice will also be communicated by email and SMS text message.

## Appendix 6 Designated TSO representative details

Comment [I26]: Table 3  
r25(1)(f)

Individual	Email address	Cell phone number	Direct dial number
System Duty Officer (contactable 24/7 via Gas Operations Control)	<a href="mailto:gas.controller@vector.co.nz">gas.controller@vector.co.nz</a>	027 442 9051	06 755 0861 or 06 759 6499 or 0088 162 141 3928 (satellite phone)

Proposed