Gas Governance (Critical Contingency Management) Regulations 2008 (as amended in 2013)

Information for Consumers

Gas supply in New Zealand depends on a number of gas fields, the high-pressure gas transmission system, and the local distribution networks to deliver gas to consumers. While the supply system is generally reliable and robust, incidents can occur that interrupt gas delivery, such as gas production station outages or damage to a gas pipeline or associated plant.

If such an event should happen, the Gas Governance (Critical Contingency Management) Regulations 2008 (the Regulations) empower the Critical Contingency Operator (CCO) to declare a critical contingency and to issue directions for demand curtailment – that is, instructions to stop using gas – in order to prevent system pressures falling to unsafe levels.

If the CCO gives demand curtailment directions, consumers will receive instructions from their gas retailers. Large consumers (those who use more than 15TJ of gas per day) will receive instructions from the transmission system owner.

Consumers <u>must comply</u> with these instructions under the Regulations.

This document describes the process for managing gas supply outages and outlines the steps that gas consumers can take to ensure they are adequately prepared to respond in the event of a Critical Contingency.

Responding to Critical Contingencies

The fact that gas transmission pipelines are, for the most part, located below ground makes them more resilient than other types of infrastructure that depend on above-ground assets, such as electricity or telephone lines. However, damage to gas transmission pipelines can occur through such natural disasters as floods, earthquakes, volcanic or geothermal incidents, tsunamis, and landslides. Gas transmission pipelines may also be damaged by parties carrying out works in the vicinity of the pipeline system. Gas supply can also be disrupted due to production problems at gas fields or processing plants. Fortunately, these types of incidents are rare, but the consequences can be high and it is essential that robust plans and procedures are in place to manage these situations as efficiently and effectively as possible.

Should a critical contingency occur, it is essential that demand on the gas transmission system is managed to prevent system pressures falling to unsafe levels and to safeguard, for as long as possible, continued (albeit limited) supply to connected gas distribution networks. Failure to maintain satisfactory supply to connected gas distribution networks could result in longer-term outages due to the complexities and safety requirements associated with purging and re-commissioning.

During a Critical Contingency

The CCO will make a declaration of a critical contingency if pressure on the transmission pipelines has, or is expected to, fall below specified threshold levels – that is, when gas is leaving the pipeline at a much greater rate than it is entering. The CCO will call for demand curtailment – that is, for gas consumers to stop using gas – in order to stabilise pressure in the transmission pipelines. Many critical

contingencies can be managed by curtailing only the load from large petrochemical and power generation plant.

The CCO issues curtailment directions to transmission system owners, who relay them to large consumers and to retailers, who in turn notify their customers. If you are required to curtail demand, you will receive an urgent notice from your retailer or transmission system owner. *Under the Regulations, consumers must comply with directions issued by their gas retailer or transmission system owner as soon as possible after directions are given.*

Curtailment is done by Band

The curtailment bands are for all non-domestic gas consumers according to annual consumption and other factors, and are shown in Table 1. The normal demand curtailment order is from 0 to 7 and the normal demand restoration order is the reverse.

Gas retailers are required to categorise their consumers into one of these curtailment bands and to inform the CCO of the band, demand size and location. They must also maintain up to date emergency contact details for their non-domestic consumers.

| Curtailment band | Consumption | Description |
|------------------|--|---|
| 0 | N/A | Gas used for injection into gas storage. |
| 1 | More than 15 TJ per day | Consumers supplied directly from the transmission system and that have an alternative fuel capability. |
| 2 | More than 15 TJ per day | Consumers supplied directly from the transmission system that do not have an alternative fuel capability. |
| 3 | More than 10 TJ per annum and up to 15 TJ per day | Large industrial and commercial consumers. |
| 4 | More than 250 GJ per annum and up to 10 TJ per annum | Medium-sized industrial and commercial consumers. |
| 5 | More than 2 TJ per annum | Consumers with essential services designations. |
| 6 | 250 GJ or less per annum | Small commercial consumers. |
| 7 | Any | Consumers with critical care designations. |

Table 1 – Demand Curtailment Bands

Preparedness Checklist

Here is a simple checklist to ensure you are prepared to comply with directions from your gas retailer or transmission system owner should a critical contingency occur.

• Ensure people in your business know who your gas retailer is and what actions they need to take if a curtailment direction is received.

- Know your allocated curtailment band if it is not clear from the table above, consult with your gas retailer or transmission system owner.
- Ensure that your gas retailer or transmission system owner has your emergency contact details recorded correctly.
- Prepare plans to stop using gas as soon as possible if directed by your gas retailer or transmission system owner.

Your prompt actions to comply with directions from your gas retailer or transmission system owner during a critical contingency will assist in maintaining long-term security of supply and prevent the consequences of the event from escalating and causing a more prolonged outage.

Designations

Designations can provide a measure of priority to gas consumers who satisfy certain criteria. There are four categories of designations:

- Critical care, for consumer sites that provide hospital care, residential care, or primary health
 care; dispense medicine; operate a prison; or provide essential support services for a critical
 care provider.
- Essential services, for consumer sites that provide mortuary services; heat treatment of biohazards; processing and supply of municipal drinking water; treatment and processing of municipal sewage; or police, fire, and other emergency services.
- Critical processing, for a commercial or industrial process where:
 - an immediate complete shutdown would require disposal of dangerous or toxic chemicals or extensive operations before the plant could resume operation; or
 - gas is required for a defined period in order to avoid serious damage to plant, mitigate serious environmental damage, or prevent inhumane or cruel treatment of animals at an abattoir.
- Electricity supply, to allow an electricity generating unit to start up and switch to an alternative fuel or to provide ancillary support to the electricity system.

Consumers who receive critical care or essential services designations are placed in curtailment band 7 or 5, respectively – higher priority bands than they would otherwise occupy. Those with critical processing or electricity supply designations may be able to use a limited amount of gas during a critical contingency to wind down plant operations or to switch to an alternative fuel. It is important to note, however, that any non-domestic consumer, regardless of designation, may be directed by the CCO to curtail demand.

Consumers who consider that they meet the criteria for designation must make an application to Gas Industry Co. Please note that applications need to be made in advance, as there are only very narrow grounds for approving a critical care or essential services designation during a critical contingency, and none for a critical processing or electricity supply designation. An application form and more information are available at http://www.gasindustry.co.nz/work-programmes/critical-contingency-management/current-arrangements/contingency-designation-applications/

Further Information

Gas Industry Co has prepared a list of frequently asked questions, available here

Further information and resources about critical contingency arrangements and supporting plans and procedures can be found on the Gas Industry Co website at http://www.gasindustry.co.nz/work-programmes/critical-contingency-management/current-arrangements/ or at the CCO website at www.cco.org.nz. During a critical contingency the CCO website will be updated to contain information including any demand curtailment notices issued and details about the cause and remedy of the incident.

In addition, interested parties can subscribe to receive notices of critical contingencies from the CCO website, www.cco.org.nz.