

GAS CRITICAL CONTINGENCY MANAGEMENT FAQs

What is a gas critical contingency?

Critical contingencies occur when there is a shortage of gas supply relative to demand. They can be caused by an outage in a gas production station or damage to a gas transmission pipeline. A critical contingency is triggered when the imbalance between gas supply and demand leads to a drop in the pressure on the gas transmission system such that intervention is required to ensure a sufficient supply of gas to the distribution networks.

Critical contingencies are managed under the Gas Governance (Critical Contingency Management) Regulations 2008 (CCM Regulations).

Why does falling pressure matter?

If the pressure in a gas distribution network falls below critical safe levels, then there will not be enough gas to operate consumers' gas appliances, so operating appliances and pilot lights will go out. This means that gas supply cannot be restored easily, because repressurising the distribution network could lead to gas appliances inadvertently left on or those with unlit pilot lights to allow gas to escape indoors, causing a potentially hazardous situation. In such situations, gas supply can only be restored safely by the network owner individually disconnecting each consumer, repressurising the distribution system, and then individually reconnecting each consumer. This would be a prolonged and difficult process, so the CCM Regulations are designed to manage a critical contingency by preserving pipeline pressures for as long as possible.

Who is the CCO?

Core Group has been appointed by Gas Industry Co to perform the duties of CCO.

The CCO is required to:

- determine and declare a critical contingency;
- determine the extent and location of required load shedding (curtailment) in order to balance supply and demand;
- issue curtailment directions;
- continually monitor the system and fine tune curtailment directions as necessary; and
- coordinate restoration when it is safe for demand to return to normal

The CCO must issue its directions to the transmission system owner (TSO) and keep key stakeholders informed.

More information about the CCO is available on their website at <http://www.cco.org.nz/>.

Who is the transmission system owner?

The gas transmission pipelines transport natural gas at high pressures from production stations in Taranaki to towns and cities around the North Island. In some cases transmission pipelines supply gas to end-users.

The pipeline system is owned and operated by First Gas Limited. A schematic of the transmission pipelines in the North Island can be found [here](#).

How does the CCO decide whether to declare a critical contingency?

Declaration of a critical contingency is decided by how close operational conditions in the gas transmission system are to defined pressure threshold limits at strategically selected locations. The CCO will declare a critical contingency if a threshold is breached or if there is a reasonable expectation that a threshold breach is unavoidable.

What is demand curtailment?

Demand curtailment is where the CCO gives directions for industrial and commercial gas consumers to stop using gas.

The gas system is different from the electricity system. The electricity system operator and the electricity distributors can reduce electricity demand by remotely opening circuit breakers. No such equivalent exists for gas. The gas system is dependent on users reducing their use as instructed during a critical contingency.

The transmission system owner relays the CCO's curtailment directions to large consumers directly connected to the transmission system and to retailers, who in turn instruct their customers to cease their gas usage as soon as possible.

Which customers will be curtailed first?

The process of curtailment of gas supply has been designed to prevent pressure falling to an unsatisfactory level on the pipeline as quickly as possible, while minimising the impact on consumers and maintaining essential services.

Gas storage facilities and major consumers connected directly to the transmission system, such as power stations, will be curtailed first. If this is not sufficient to restore correct operating pressure, the CCO will issue curtailment directions for distribution-connected customers, starting with industrial and large commercial gas consumers, and working down to medium and small commercial gas consumers.

The priority throughout a critical gas contingency is to minimise risks to the safety and integrity of the gas system, as well as to the health and safety of the public.

If I am an industrial or commercial gas user, what do I need to do?

Know who your gas retailer is and ensure they have up to date contact information for your organisation.

If a critical contingency is declared and your retailer (or the transmission system owner) contacts you and instructs you to stop using gas, be ready to comply. You should have a plan of how your organisation will do this.

If your organisation has special circumstances that mean it may be appropriate for it to be given priority use of gas during a critical contingency, discuss this with your gas retailer, as it may be appropriate to apply for a critical contingency designation. Please note that, except in very limited circumstances, designation applications cannot be accepted during a critical contingency.

My gas retailer has told me I need to stop using gas. Do I have to?

Yes. If your retailer has instructed you to reduce or totally stop (curtail) your gas use, you must comply with the request. For very large users, the curtailment instruction may be issued by the transmission system owner and those instructions must be followed.

Compliance with curtailment instructions from the transmission system owner or your retailer is required under the CCM Regulations. Alleged breaches of the CCM Regulations may be subject to enforcement action under the Gas Governance (Compliance) Regulations 2008. Additionally, the CCM Regulations provide that certain breaches may be subject to prosecution through the courts

(including if a consumer fails to comply with a direction under the CCM Regulations and that failure affects the wholesale gas market).

When can I start using gas again?

The Regulations set out the process for the restoration of supply and the termination of a critical contingency by the CCO.

You will be advised by the transmission owner or your retailer when you can resume use of gas.

What if I use gas at home?

Domestic (residential) gas users do not have obligations under the CCM Regulations. However, a critical contingency may be of such severity that retailers may ask domestic users to decrease their gas use during a critical contingency. Please contact your gas retailer.

What is a critical contingency designation?

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.

More information about critical contingency designations, as well as information on how to apply, can be found at <http://gasindustry.co.nz/work-programmes/critical-contingency-management/current-arrangements/contingency-designation-applications/>. 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.

How many critical contingencies have there been?

Critical contingencies are relatively rare, and most can be managed without widespread demand curtailment. A list of critical contingencies can be found on [Gas Industry Co's website](#).

Where can I get further information?

If you have any queries about critical contingencies, please contact your gas retailer.

A link to the CCM Regulations can be found [here](#).

During a critical contingency, curtailment directions and notices from the CCO are published on the CCO website at <http://www.cco.org.nz/>. This site has full public access and no log-in details are required. The website also contains related documentation, publications and resources about the critical contingency process.