

GENERAL PROCEDURE

GAS LOAD CURTAILMENT AND GAS RATIONING AND RECOVERY GUIDELINES

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1 Issue 8.0

Issue 8.0 of the Gas Load Curtailment and Gas Rationing and Recovery Guidelines (Guidelines) is a review and update of Issue 7.0, March 2003. No changes have been made to the structure of the Curtailment Tables.

This issue reflects the introduction of the National Gas Rules, and the creation of AEMO, the successor in law to VENCORP.

This document describes the process of curtailment, if required, under clause 53 of the National Gas (Victoria) Act 2008 and will ultimately be a key reference document for the Gas Emergency Protocol.

1.1 Changes from previous Guidelines

1. The revised guidelines update the references to legal instruments that confer powers to and obligations on AEMO. The Market and System Operating Rules has been replaced by the National Gas Law and National Gas Rules.
2. References to VENCORP become references to AEMO.

2 Introduction

2.1 AEMO's Functions and Powers

AEMO's functions and powers relating to the gas industry are defined in Chapter 2 Part 6 Division 2 of the National Gas Law (NGL) (applicable in Victoria by section 7 of the National Gas (Victoria) Act 2008). For load curtailment and gas rationing or recovery these powers include:

- controlling the security of the gas transmission system; and
- carrying out directions (related to curtailment or rationing of limited gas supplies) given by the Minister to AEMO under section 207 of the Gas Industry Act 2001.

Pursuant to section 207 of the Gas Industry Act 2001, AEMO may give directions in writing to a market participant in respect of the operation or use of any equipment or installation and/or the control of the flow of gas for the purposes of:

- facilitating the reliability of the supply of gas; or
- facilitating the security of the gas transmission system or gas distribution system.

The guidelines to be followed by AEMO have been developed in accordance with Chapter 2 Part 6 Division 4 of the NGL, and refer to the emergency curtailment list. In preparing these guidelines, AEMO has consulted with Government Departments which have agreed to the principles, categorisation and prioritisation of customers in these Guidelines.

2.2 Direction from the Minister

In the exercise of AEMO's functions and powers under Chapter 2 Part 6 Division 2 Subdivision 2 of the NGL, AEMO has been directed by the Minister "to have regard to the economic and social needs of the community where AEMO considers it necessary or appropriate to do so". The Guidelines outline how AEMO will meet its obligations to the community.

3 Curtailment

3.1 Curtailment Order and Response

AEMO has developed Curtailment Tables that are based on system security criteria and has then consulted the Government in accordance with its obligations under the National Gas Rules (NGR). The Curtailment Tables are used to prepare the emergency curtailment lists required under Rule 343 of the NGR. The emergency curtailment lists are made available to Market Participants through the AEMO Market Information Bulletin Board (MIBB).

The Curtailment Tables specify the order and extent of curtailment of categories of gas customers with the objective of providing the required level of load shedding within the limited time available before system security is breached as defined in the System Security Procedures. The System Security Procedures prepared by AEMO specify the minimum pressures that AEMO must provide at critical gas transmission system delivery points in order to ensure that flows of gas into distribution networks and interconnecting pipelines are adequate to meet demand and maintain minimum pressures in distribution networks.

A rapid response in load reduction of the required magnitude is critical, given the limited amount of gas stored as line pack available in the gas transmission system. The order of curtailment is primarily driven by the requirement to shed load at the fastest possible rate and, in practical terms, this means that the largest loads are shed first. The order of curtailment is in descending order of load size with the following exceptions:

- essential and critical services are placed last in the order of curtailment;
- non-critical rationed services: approved uninterruptible, continuous processes, and gas allocations to enable customers to convert to or start-up with alternative fuels are placed in the order after all other Tariff D¹ industrial and commercial sites, and before essential and critical services; and
- provision has been made for voluntary restrictions for residential and small commercial and industrial sites not explicitly shown in the curtailment lists, excepting classes exempted by the Department of Human Services.

In the event of a threat to system security that is attributable to a transmission constraint, then to the extent practicable, Gas Retailers will be directed to instruct their customers to limit gas usage to their authorised maximum daily quantity (AMDQ) or AMDQ credits and to completely cease further usage of gas at those sites that have already exceeded their AMDQ or AMDQ credits level on the day. Market Customers will be advised directly by AEMO. Curtailment of unauthorised loads reflects requirements under AEMO's Access Arrangement and Rule 343 of the NGR, and is implemented by Table 0 of the Curtailment Tables.

3.2 Exemptions

A minimum level of gas consumption may be permitted on the grounds of public safety, plant or process safety, health or environmental risks; however, gas users must reduce their demand as quickly as possible to the minimum level. Exemption from full restrictions is only granted for specific incidents on the day. Gas users seeking exemption from full restrictions must apply to their gas Retailer and provide grounds for exemption that must then be approved by AEMO. Market Customers must apply directly to AEMO.

3.3 Curtailment Directions

In scenarios involving a threat to or breach of system security, AEMO may give directions to market participants to curtail gas load.

¹ The curtailment lists are comprised of customers' sites registered as Tariff D metering tariff in the AEMO Meter Installation Register. Tariff D sites generally have loads in excess of 10,000 GJ/year

Curtailement directions are only issued as a last resort after due consideration of alternate sources of gas supply and are limited to that extent required to maintain or restore system security as defined in the AEMO System Security Procedures.

In instances where curtailement of gas fired power generation is required, due consideration will be given to the level of power generation reserve available.

3.4 Enforcement

Any failure by a Participant, Gas Company or gas customer to comply with a load curtailement direction properly issued by AEMO may be dealt with under section 208 of the Gas Industry Act 2001 (a civil penalty provision for natural persons, and an indictable offence for a body corporate).

3.5 Communication of Directions to Curtail Load

AEMO will issue curtailement directions to all Market Participants.

Gas Retailers will contact their gas customers to arrange the necessary load curtailements.

AEMO will contact Market Customers directly.

4 Curtailment Tables

If AEMO is required to, or determines that it is necessary to, implement load curtailement under these Guidelines, then AEMO must do so, to the extent that it is reasonably practicable in all the circumstances, as follows:

The order in which curtailement is to be implemented should commence with Table 0 (as set out below). Table 1 may be curtailed in whole or in part in the sequence shown commencing with Table 1(a).

Within each of Tables 2 to 9 (inclusive) and 11, curtailement should occur in descending order of customer MDQ². Where a customer is included in Table 9 or 11 as well as another Table, the Table to apply to that customer will be Table 9 or 11, as the case may be.

Where practicable AEMO should endeavour to confine the curtailement to impacted regions and upstream regions where this can materially reduce the impact of a contingency.

Following implementation of curtailement of customers in Tables 1(a) to 1(d) AEMO may issue a public appeal for all gas customers to voluntarily reduce gas use.

Following implementation of curtailement of customers in Tables 2 to 5 (inclusive) and prior to proceeding to curtail any customers in Tables 6, 7, 8, 9(a), 9(b), 10(a), 10(b) and 11, where time permits, AEMO should issue a public appeal for all gas customers to voluntarily reduce gas use.

AEMO will also have regard to the needs of the electricity supply-demand position and alternate sources of power when curtailement of gas fired power generation is required. Before curtailing gas fired power generators AEMO will consider the following:

- availability of other power generation;
- whether curtailement will invoke a Level of Reserve (LOR) notice and if so the type of the LOR;
- the anticipated power demand;
- provision of gas to enable gas fired generators with dual fuel capability to convert to, start-up and run using alternative fuel supplies; and
- advice to Government of any proposed curtailement.

² Customer MDQs are as determined by AEMO and are made available in curtailement lists for each Market Participant on the AEMO MIBB.

4.1 Classification of Customers

The following is the classification of customers contained in each of the Curtailment Tables:

4.1.1 Table 0

In the advent of curtailment to resolve a threat to system security attributable to a gas transmission constraint:

- a. Customers with no AMDQ or AMDQ credits who are classified as Tariff D transportation tariff in the AEMO Meter Installation Register; and
- b. Customers where usage is in excess of assigned AMDQ and AMDQ credits and who are classified as Tariff D transportation tariff in the AEMO Meter Installation Register are to be limited to the authorised quantity.

4.1.2 Table 1

- a. Withdrawals into Underground Gas Storage.
- b. Gas fired power generation scheduled by AEMO³.
- c. Customers who have entered into contracts with a gas company which allows the interruption of supply of gas to that customer, to the extent that the contract so provides for the interruption of gas to that customer.
- d. Exports via interconnections subject to alternative gas supplies being available to export gas customers in the same categories as specified by Curtailment Tables in Victoria that have not been curtailed.

4.1.3 Table 2

Customers with MDQ equal to or above 5,000 GJ/d curtail to 40% of MDQ.

4.1.4 Table 3

Customers with MDQ equal to or above 1,000 and less than 5,000 GJ/d curtail to 40% of MDQ.

4.1.5 Table 4

Customers with MDQ equal to or above 5,000 GJ/d curtail balance of load.

4.1.6 Table 5

Customers with MDQ equal to or above 1,000 and less than 5,000 GJ/d curtail balance of load.

4.1.7 Table 6

Customers with MDQ equal to or above 500 and less than 1000 GJ/d.

4.1.8 Table 7

Customers with MDQ equal to or above 250 and less than 500 GJ/d.

4.1.9 Table 8

Customers with MDQ less than 250 GJ/d who are classified as Tariff D transportation tariff in the AEMO Meter Installation Register.

³ Start-up, Conversion or Running gas as approved for dual fuel customers excepted. See Table 9(b).

4.1.10 Table 9

- (a) Customers with uninterruptible continuous processes, to prevent major material damage to furnaces or plant, only as currently approved by AEMO.
- (b) Start-Up, Conversion, and Running Gas as approved for accredited Dual Fuel sites available after AEMO issues the curtailment direction, subject to notice of gas requirements being given to AEMO and approval by AEMO in writing.

4.1.11 Table 10

- (a) Gas area heating at all residential dwellings and commercial and industrial customers classified as Tariff V⁴ transportation tariff, Department of Human Services exemptions excepted.
- (b) Gas use for other than area heating at all residential dwellings and commercial and industrial customers classified as Tariff V transportation tariff, Department of Human Services exemptions excepted.

4.1.12 Table 11

Essential and Critical Services customers identified by the Department of Human Services: Hospitals, Aged and Infirm Residential Institutions and laundries servicing those hospitals and institutions. Services providing Blood Plasma and related products to hospitals.

4.2 Isolation of selected Networks

In the event that curtailment does not reduce demand sufficiently to secure the transmission system, distribution networks may be selectively isolated to ensure the integrity of the system. In this event, customers in Table 11 falling within these networks might have to be curtailed.

5 Gas Rationing and Recovery

The previous sections explained the structure of the Curtailment Tables developed by AEMO as directed by the Minister. The following sections provide additional explanation of the principles underlying gas rationing and recovery and also the factors that must be considered by AEMO before issuing directions for gas rationing and recovery.

5.1 Principles

The following principles apply to part or whole of the gas transmission and gas distribution systems for the purpose of rationing of limited gas supplies and for the restoration of gas supply to customers.

- Priority will be given to maintaining gas pressures in the gas transmission pipelines and networks in accordance with the System Security Guidelines to avoid unmanageable disruption to customers.
- Risks to the safety and integrity of gas transmission and distribution networks and to customer appliance usage (i.e. relighting) should be minimised.
- Risks to the health of Victorians and their physical environment should be minimised
- Long term economic (including physical) damage to key Victorian industries should be minimised.
- Directions given by AEMO for restoration or rationing of supply will be given under the Rule 343 of the NGR, subject to AEMO's powers and functions.

⁴ Tariff V customers are comprised of residential and small to medium sized commercial and industrial gas customers, normally with annual loads less than 10,000 GJ.

- Supply to customers will only be restored if it can be reasonably expected to be maintained.
- Restoration of supply will occur in accordance with the customer categorisations provided in section 5.2 below.
- Rationing of supplies of gas, if required, would occur in descending order through the categorisation of customer types given below.
- The approach of “Jobs before showers or heating” and preserving the economic and employment interests of the state will be adopted where possible.

The above principles have been used to develop the following customer categories. These are shown in priority order for rationing gas and returning supply to customers. Gas Rationing and Recovery Tables with indicative planning loads are maintained by AEMO following these principles, categories and the priority order.

5.2 Categorisation of Gas Customers (ordered for rationing gas and returning supply)

5.2.1 Essential Services

Those services essential for maintenance of the basic health needs of the community:

- Public Hospitals/Private Hospitals.
- Nursing Homes/Supported Residential Services/Hostels.
- Day Procedure Centres performing urgent surgery or medical treatments i.e. dialysis, chemotherapy treatment.
- Drug Rehabilitation Residential Services.
- Disability Residential Units/Institutions.
- High Rise Public Housing Accommodation (bulk gas services).
- Secure Youth Welfare Residential Juvenile Justice Facilities Services.
- Laundries servicing hospitals/aged and infirm institutions care facilities.
- Services involved with the collection, supply or production of Human Blood and blood products.
- Rendering.

5.2.2 Critical Services

Those services required to support basic food and pharmaceutical including supply of these products and services to the community:

- milk & bread supply, essential Pharmaceuticals.
- supply chain enablement necessary to support Essential Services.

5.2.3 Non-Critical Rationed Services

- Uninterruptible continuous processes where continued loss of supply could result in major plant damage.
- Those services required for the environment and general health needs of the community.

Automatic and Individual Exemptions granted by Government on the advice of Department of Human Services, in consultation with the Department of Innovation, Industry and Regional Development and the Department of Primary Industry, in accordance with section 6:

- Medical/Surgical/Linen manufacturers.
- Laundries.
- Crematoria.
- Day Procedure Centres.
- Biomedical incinerators.
- Chemical industry for storage and disposal of hazardous chemicals, manufacture of PVC and solvent waste treatment.

5.2.4 Key economic industries

Tariff D customers:

Supply to other industries not detailed elsewhere in this document shall be returned to all businesses within an industry and in an order to be determined by AEMO in consultation with the DPI, DHS and DIIRD.

In determining the order the following will be considered: The criteria for this ordering are:

- The return to work of any areas of the work force stood down due to the gas shortage event.
- Average gas usage for businesses within the industry sector.
- Glass, and packaging for non-essential supply chains.
- The ability of industries to curtail usage if required.
- Enabling supply chains.
- The overall benefit to the Victorian community of resuming supply to the industry sector.
- Authorised versus unauthorised users in accordance with AEMO's Access Arrangement.
- The minimisation of the impact on plant integrity.
- The protection of physical assets.
- The ability of the business to hold time sensitive materials.
- Meat including small goods.
- Automotive, including supply chain (e.g. glass windscreens, foundries, die casters, etc).
- Aerospace.
- Industrial Kilns, for plant integrity purposes.
- Food Processing.
- Beverages & Malt.
- Textiles.
- Packaging.
- Chemicals.
- Hotels.
- Other Industry.
- Businesses that will suffer loss due to the inability to hold "time sensitive" product without gas (This is intended for industries where the production of time sensitive raw materials cannot be halted eg dairies).

5.2.5 Residential and Small Business

- Phase 1: Cooking, hot water.
- Phase 2: Area heating.

5.2.6 Non Process Heating

Building heating, commercial showers, pool heating, dual fuel users.

6 Exemption Policy and Process

6.1 Community

It is recognised that many persons (as gas users) require prompt and clear advice as to whether, given their health status, they should continue to conserve gas during times when supply to Table 10⁵ of the Curtailment Tables and has been curtailed. A policy of allowing persons to self-exempt from curtailment of supply subject to their health status fitting a category below has been adopted.

The Department of Human Services (DHS) determines self-exemptions based upon health status. DHS has developed a self-exemption process based on medical and other related grounds. The criteria for self-exemption will be included with the gas restriction notices that are to be published in the daily press.

People with any questions relating to seeking clarification of the categories of self-exemption categories may telephone the DHS information line Community Call Centre to gain further information.

6.2 Self-Exemption: persons with complex medical conditions or health needs

The following are indicative of the DHS self exemption categories, however the current categories will be released when required:

- People with terminal illness and receiving Palliative Care.
- People receiving Hospital in the Home treatment services.
- People dependent on life support systems.
- Women in the last three months of pregnancy with health complications.
- Babies and children under 5 years of age.
- People aged 70 and over.
- People with chronic illness or other chronic medical conditions (including moderate to severe skin conditions) where those people whose health will or could be adversely affected by the restrictions.
- People with moderate to severe physical, intellectual or psychiatric disability.

7 Voluntary restrictions

During a prolonged gas supply problem when curtailment of industry has occurred, AEMO and/or the Government may seek to have the community including industry, voluntarily reduce their consumption of gas in accordance with the gas rationing and recovery principles (Section 0).

⁵ Table 10 covers residential and small to medium (Tariff V) commercial & industrial gas consumers.

Voluntary restrictions are to be applied in accordance with the following criteria and be publicly advertised.

7.1 Industrial and Commercial Customers

Industrial and commercial gas users who have not been directed to curtail load may be asked to observe the following voluntary restrictions:

- Minimise gas usage for all purposes (hot water, cooking, and process heating).
- No gas powered heating or cooling of premises.
- Postpone production processes requiring gas, where possible.
- Reduce production outputs to a minimum.
- Turn off all non-essential gas appliances.
- Use alternative fuels, where possible, such as LPG, oil.

These voluntary restrictions do not apply to the use of gas powered heaters or air conditioners for those businesses that require heating or air conditioning to specifically avoid the spoiling of stock; for maintaining the integrity of production process equipment; or for the safety of people or animals.

Guidelines for these voluntary restrictions will be, where possible and time permitting, published in the media.

7.2 Residential Customers

- Minimise gas usage for area heating purposes.
- Minimise gas usage for all other purposes including hot water and cooking.

Guidelines for these voluntary restrictions will be, where possible and time permitting, published in the media.

7.3 Penalties

Penalties may be applied for non-observance of gas restrictions. These may be applied in accordance with the publicly advertised criteria.