

Recommendation to the Minister of Energy on Arrangements for the Effective Management of Critical Contingencies

June 2008





About the Gas Industry Co

Gas Industry Co was formed to be the co-regulator under the Gas Act.

As such, its role is to:

- recommend arrangements, including rules and regulations where appropriate, which improve:
 - o the operation of gas markets;
 - o access to infrastructure; and
 - o consumer outcomes;
- administer, oversee compliance with, and review such arrangements; and
- report regularly to the Minister of Energy on the performance and present state of the New Zealand gas industry, and the achievement of Government's policy objectives for the gas sector.

Authorship

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Executive summary

The purpose of this document is to recommend regulations to ensure effective and efficient management of a situation when gas is in short supply (whether due to a short-term production outage or physical problems with a transmission system) and the market proves unable to manage that situation through the normal commercial operations. The term 'critical contingencies' will be used to describe such situations.

Arrangements for the effective management of critical contingencies are a key component of an efficient gas market. When demand exceeds supply and parties are unable to, or choose not to, balance their own positions, achieving balance in the gas supply system usually requires load curtailment. Establishing mandatory processes for the management of critical contingencies will produce more predictable outcomes as well as improving compliance with curtailment instructions.

The current industry arrangements for contingency management (through the voluntary 'National Gas Outage Contingency Plan' or NGOCP) have, traditionally, been sufficient. However, structural changes in the gas industry mean the NGOCP has been acknowledged as no longer meeting the needs of the industry. Gas Industry Co has reviewed the NGOCP and identified a number of problems with the arrangements. Specifically, the NGOCP lacks commercial incentives, allows free-riding, lacks any proper governance, and has no workable means of enforcing compliance.

Improved arrangements, in the form of regulations to be made under the Gas Act 1992 (the Act), have been developed through the operation of an industry group (Wholesale Market Working Group), a comprehensive consultation process comprising four separate documents, including a Statement of Proposal, four stakeholder workshops, and ongoing input from the Contingency Management Implementation Group. Through these mechanisms the issues have been extensively canvassed with stakeholders.

The proposed regulations will:

- identify the onset of a critical contingency;
- establish procedures for effective management of a critical contingency;
- provide for the appointment of a Critical Contingency Operator (CCO) whose primary role is to restore the supply/demand balance by targeted curtailment of load; and
- establish a price which is used to settle inadvertent trading between those parties whose suppliers have failed and those parties who have access to supplies but whose customers have been curtailed.

It should be noted that this recommendation proposes "back-stop" arrangements which will only be instigated in relatively rare circumstances. Balancing gas supply and demand is, primarily, a task best

left to the market. Gas Industry Co is assisting that process where appropriate, for example through the work of the Transmission Pipeline Balancing Advisory Group. However, there will always be a need for back-stop arrangements such as those contained in this recommendation.

One of the failings of the NGOCP has been the lack of an effective compliance regime. The effectiveness of the proposed regulations will be enhanced by their inclusion within the ambit of the Gas Governance (Compliance) Regulations 2008. Accordingly, this recommendation is accompanied by a recommendation titled 'Recommendation to the Minister of Energy on Critical Contingency Amendments to Gas Compliance Regulations' (the 'Compliance Recommendation').

Overall, it is anticipated that introduction of the regulations will provide two main benefits:

- more effective management of critical contingencies; and
- the provision of commercial incentives for the industry to manage outages more efficiently and, thereby, lessen the likelihood of a critical contingency being triggered.

Provided the regulations are approved within the typical time frame indicated by MED, and allowing for the establishment activities, it is anticipated that the implementation of the regulations could be completed as early as mid-2009.

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Introduction

1.1 Background

Because of the shared nature of the high pressure transmission system, a shortage of gas supply has the potential to adversely affect all users of the system. The commercial arrangements which govern use of the largest pipeline, Maui, are aimed at isolating the effect of shortages to those shippers whose supplies have been lost. However, the potential loss of revenue from curtailing valuable load, the inability to control the demand of many customers, the uncertainties surrounding the extent and duration of supply outages, and the desire to rely on pipeline inventory to cover such events tends to result in mixed responses to the requirement to self-balance. The absence of any on-the-day spot market can also limit opportunities for participants to manage their positions.

To the extent that shippers who have lost gas supplies do not reduce their offtakes, the linepack in the pipeline will deplete and pressures will fall. If that situation is allowed to continue unchecked then it is possible that pressures could fall to such a level that insufficient pressure remains in the system to supply the distribution networks. The outcome of such an event would be an extensive outage for any distribution network so affected. Reinstatement of supply to such a network would require significant time and resources to isolate customers, purge and re-pressurise the system, and re-light customer installations. That exercise would be very costly and, because reinstatement would take several weeks in a large urban setting, is likely to result in the permanent loss of a number of gas customers.

Taken together, these factors demonstrate the requirement for a set of back-stop arrangements which are initiated when the market fails to self-manage an event and the contingency has reached a critical level. Until now, the back-stop arrangement has been the NGOCP—a voluntary arrangement operated by the gas industry.

Recognising the shortcomings in the NGOCP, which have become more apparent with changes in the industry structure, New Zealand gas industry participants asked Gas Industry Co to review the current arrangements for managing gas contingency situations.

This request was prompted by:

- a general view among industry participants that current arrangements are no longer appropriate;
- the absence of any contingency pricing regime in respect of non-compliance and/or gas supply imbalances during situations where either gas supply has been lost or a transmission pipeline has otherwise been compromised; and
- the lack of certainty that voluntary arrangements provide, as evidenced by the public withdrawal of Contact Energy from the current arrangements.¹

In response to the industry request, and noting the pivotal importance of security of supply to the national gas transmission system, Gas Industry Co has been reviewing arrangements for managing gas outage and contingency situations².

1.2 Objectives

Recognising that the arrangements need improvement, the work undertaken by Gas Industry Co is consistent with the deliverables under paragraph 13 of the Government Policy Statement on Gas Governance (GPS), dated April 2008 requiring 'Sound arrangements for the management of critical gas contingencies'. The work is also consistent with the previous GPS (dated October 2004) which required that 'Risks relating to security of supply, including transport arrangements, are properly and efficiently handled by all parties'.

The Act requires Gas Industry Co, in recommending regulations under section 43F of the Act, to have the following objective: 'risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties'. The current GPS adds to this the outcome of having in place: 'Sound arrangements for the management of critical contingencies'.

Taking into account these policy objectives, Gas Industry Co considers that the appropriate regulatory objective for this work stream is:

to achieve effective handling of a national or regional critical gas contingency without compromising long-term security of supply.

This regulatory objective is used to assess the reasonably practicable options for the purposes of section 43N of the Act.

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Contact Energy has, nevertheless, committed to acting 'reasonably and responsibly' during gas contingencies.

The Statement of Proposal referred to 'outage and contingency'. Following industry submissions the terminology was changed to 'critical contingency' in order to clearly distinguish a critical contingency under the regulations from situations handled through the normal commercial arrangements under MPOC and VTC. To avoid confusion, the term 'critical contingency' is used throughout this Recommendation.

A high level of compliance with the proposed Gas Governance (Critical Contingency Management) Regulations (the proposed Regulations) will help to ensure the benefits of the regulations are achieved. For this reason, Gas Industry Co is also making a recommendation for amendments to the recommended Gas Governance (Compliance) Regulations in conjunction with this recommendation.

'Pre-critical' management

Although the overall objective is broad, the focus of this recommendation is on critical contingencies, i.e. those situations that the market is unable to manage via commercial arrangements. This means that there are aspects of the existing arrangements which will need to either be folded into other industry arrangements or be catered for separately. For example, the existing 'Phase 1' of NGOCP does not have an equivalent in the recommended critical contingency management arrangements. Gas Industry Co will assist the industry to accommodate these functions in the Critical Contingency Management Plans (CCMP), prepared under the proposed Regulations, and existing commercial arrangements.

Analysis

This section discusses the work which was undertaken to identify the problems with the current arrangements and the options which were considered to address those problems. It outlines the extensive consultation which was undertaken and the involvement of gas industry representatives in the development of options.

2.1 Problems with the current arrangements

There are four key problems with the current arrangements which need to be addressed in order to establish an effective critical contingency management regime. These key problems are described below.

NGOCP is not mandatory

The NGOCP is a voluntary arrangement to which the industry players are not contractually bound. This creates a potential problem during a critical gas contingency because it is uncertain whether all participants will comply with instructions.³ It may also be possible that other contractual commitments could prevent a participant complying with instructions.

Gas Industry Co has concluded that the only practicable means of making the arrangements mandatory is to recommend regulations under the Act.

NGOCP is not suited to the post-Maui era

Initial work on replacement arrangements focused on the NGOCP and on developing those arrangements into a more effective and binding set of arrangements to address gas contingencies. Some submitters, in response to the July 2006 discussion paper, suggested this approach was too narrowly focussed on the Maui field and the Maui Pipeline Operating Code (MPOC) and that it could be inadequate to deal with contingencies in a multiple gas field environment with reduced flexibility from the Maui field.

As a general rule, it is the lack of compliance with the normal commercial arrangements which gives rise to critical contingencies.

By contrast, other submitters regarded MPOC as having most of the tools required to effectively manage critical gas contingencies. Although MPOC does contain provisions to assist with the management of gas contingencies, in practice it is not always the case that shippers comply with those provisions. Indeed, it is typically lack of compliance that escalates the situation to a critical gas contingency. This has led Gas Industry Co to focus on alternative arrangements which are capable of being enforced and, therefore, will more likely be complied with.

There have been a number of changes to the physical make-up of the gas industry suggesting that the principles of the existing contingency arrangements, as embodied in the NGOCP, may no longer be appropriate. These changes include:

- Maui gas supply, once the dominant source of gas in New Zealand, is becoming less important;
- new gas supplies are less flexible than Maui and are more diverse; and
- an increased reliance on gas-fired electricity generation for electricity security of supply.

Gas Industry Co acknowledges the need for a broader-based set of arrangements for gas contingencies, recognising the changes which have taken place in the energy sector since the NGOCP was established.

Lack of legal clarity to manage contingencies

Under the current arrangements there is a lack of clarity of roles and responsibilities which leads to potential confusion about what will happen during a gas contingency. In particular:

- there is no clearly defined role for any party to act as the CCO during a gas contingency;
- the obligations for participants to follow instructions from the gas system operator during a gas contingency are ambiguous and may not override contracts; and
- there is ambiguity about potential consequential liability of participants acting to curtail gas demand.

This lack of clarity of roles, obligations and potential liability could lead to poor management of a gas contingency.

The lack of a clearly defined CCO means there is no focus for managing outcomes during a contingency, with the current arrangements relying on participants cooperating through the vehicle of the Contingency Communications Team. Although cooperation has been

very good in the past, the ownership structures of the industry have changed, with associated changes in the commercial drivers. This further suggests that a cooperative model is no longer adequate.

The arrangements set out in the NGOCP do not impose any legal obligations on participants to take actions such as curtailing demand in accordance with the plan. This suggests that where there is any risk of participants being in breach of an existing contract, or creating a legal liability to a third party, participants are less likely to comply with the plan. These factors underscore the uncertainties about the effectiveness of the arrangements.

Gas Industry Co has concluded that the best means of addressing these deficiencies is to implement a set of mandatory arrangements, through Regulations made under the Act, so as to establish clear roles, responsibilities and obligations for all participants.

Inadequate commercial arrangements during contingencies

The current arrangements provide no recognition of the premium value of gas at the time of a contingency. Instead gas taken during a contingency is effectively 'borrowed' until a later point in time. A consequence is that there is no incentive for suppliers to make provision for a contingency situation. Instead the supplier is simply required to pay back the gas at a later stage.

There could be perverse incentives that arise from the current arrangements for a gas contingency (as expressed in the NGOCP) when applied in combination with the operation of the electricity market during a gas contingency.

The consequence of the inadequate commercial arrangements could be that a security of supply situation may be more likely to occur, and that longer-term security of supply may be eroded.

Gas Industry Co has concluded that a set of 'cash out' arrangements which recognise the value of gas under a critical contingency are required in order to provide a means of ensuring those parties who continue to provide gas during a contingency are paid an efficient price for that gas. These arrangements should also provide shippers and consumers with an incentive to maintain adequate backup supply, where it is more efficient to do so, rather than rely on 'borrowing' gas during a contingency and paying it back later.

The new arrangements need to provide the necessary certainty which is sought by stakeholders such as Contact Energy—specifically that a party who takes gas to which it

has no contractual right during a critical contingency will, under the proposed Regulations, be legally obliged to pay for that gas at a price reflecting the scarcity value.

2.2 Work undertaken

Wholesale Markets Working Group (WMWG)

The WMWG was established in 2005 to assist Gas Industry Co with a range of issues, including those relating to the existing industry contingency plan, the NGOCP. WMWG provided valuable input into the development of the first discussion paper on contingency management.

July 2006 discussion paper

In July 2006 Gas Industry Co released a discussion paper titled *Discussion Paper—Review* of Gas Emergency Arrangements. That paper identified the shortcomings of the NGOCP and advanced the view that what was required was a set of mandatory arrangements. Stakeholders were consulted on the form of mandatory arrangements, in particular the practical advantages offered by Regulations rather than a pan-industry agreement.

Submissions supported the introduction of mandatory arrangements. Submissions also supported arrangements which allowed the commercial mechanisms that exist within the pipeline codes (MPOC and Vector Transmission Code (VTC)) to operate until it was clear that regulatory intervention was required.

Statement of proposal

In August 2007 Gas Industry Co issued for consultation a document titled *Statement of Proposal—Gas Outage and Contingency Management Arrangements* (Statement of Proposal).

The Statement of Proposal included a detailed discussion of the market failures, together with an assessment of the reasonably practicable options to address these. The Statement of Proposal also included draft regulations, a cost-benefit analysis, and other material which Gas Industry Co considered relevant.

Submissions were received from seven organisations and that feedback is discussed in section 6.2.

Supplementary consultation paper

As a result of feedback on the Statement of Proposal a further consultation paper (the Supplementary Consultation Paper) was released in December 2007. Titled *Gas Outage* and Contingency Management Arrangements—Supplementary Consultation Paper, that paper summarised the submissions on the Statement of Proposal, provided Gas Industry Co's response on each of the issues, and identified the changes which Gas Industry Co proposed to make in light of those submissions. The document also highlighted a number of public law issues concerning the drafting of the regulations and discussed the likely changes that would be required to address these.

Contingency Management Implementation Group

Gas Industry Co convened a group of industry representatives to assist with developing the detail required to finalise the proposed Regulations. The Contingency Management Implementation Group (CMIG) has a wide-ranging brief. Its initial focus was on those items providing input to the proposed Regulations. CMIG will continue to meet, in anticipation of the proposed Regulations being approved, so as to ensure that the industry is in a strong position to implement the new critical contingency management arrangements once the Regulations are made.

Short-form consultation paper

A short-form consultation paper was released on 14 May 2008. Titled *Critical Contingency Management Arrangements—Short-form Consultation Paper*, that paper identified the key changes which had been made to the proposed Regulations as a result of the submissions on the Supplementary Consultation Paper, feedback from MED on the regulatory approach adopted in the proposed arrangements, and input from CMIG and the Transmission System Owners (TSO) on contingency thresholds. Because the changes were few, and largely technical in nature, a shorter consultation period of two weeks was allowed.

Submissions were received from nine parties and that feedback is also discussed in section 6.2.

2.3 Conclusion

There has been extensive policy development and consultation on Gas Industry Co's proposed solution. Industry submissions and feedback have been taken into account throughout the process. Industry participants are largely agreed that a regulatory approach is required to ensure efficient management of critical gas contingencies.

The conclusion reached by Gas Industry Co is that the best, reasonably practicable option to achieve the regulatory objective (effective handling of a national or regional critical gas contingency without compromising long-term security of supply) is to recommend the making of the proposed Regulations under the Act.

3

Process to establish regulations

3.1 Power to regulate

Specific power to regulate critical contingencies

Section 43F of the Act currently provides that:

- (1) The Governor-General may, by Order in Council made on the recommendation of the Minister of Energy in accordance with sections 43I to 43P, make regulations for all or any of the purposes in subsection (2).
- (2) The purposes are—
 - (a) providing for the establishment and operation of wholesale markets for gas, including for—
 - (i) protocols and standards for reconciling and balancing gas:
 - (ii) clearing, settling, and reconciling market transactions:
 - (iii) the provision and disclosure of data and other market information:
 - (iv) minimum prudential standards of market participation:
 - (v) minimum standards of market conduct:
 - (vi) arrangements relating to outages and other security of supply contingencies:

It is necessary to have defined arrangements in order to effectively manage critical contingencies without compromising long-term security of supply. Moreover, as consultation with the industry has demonstrated, it is essential that such arrangements are mandatory so as to ensure predictable outcomes when the gas system is in a state of stress. In this context, effective critical contingency management arrangements are viewed as vital to the effective operation of the wholesale gas market. Long-term security of supply, compliance with curtailment instructions, and mechanisms for accounting for gas used during a critical contingency are all important in this regard. Without such arrangements, the operation of an effective wholesale market is significantly hindered.

For these reasons, Gas Industry Co considers that effective arrangements for managing critical contingencies comes within the empowering provisions in section 43F of the Act, specifically 43F(2)(a)(vi).

The proposed Regulations refer to 'critical' contingencies. This term refers to a state of affairs in which the market has failed to arrest the development of a situation where the transmission system is delivering gas at a rate in excess of the rate at which gas is being supplied into the transmission system by producers.

The trigger which defines a critical contingency is an 'effects based' trigger, i.e. whatever set of circumstances has given rise to the critical contingency is not relevant. Rather, it is the fact that the production and transmission systems are unable to supply current levels of demand that leads to declaration of a critical contingency. The triggers are expressed in terms of a lead-time before which minimum operating pressure at a specific point will be reached.

There will be other types of contingencies which cause pressure reductions, but where these are able to be dealt with under the day-to-day commercial arrangements without breaching the critical contingency thresholds there will be no need to invoke the proposed Regulations.

Supplementary powers

Section 43S of the Act includes supplementary empowering provisions applying to any regulation or rule made under Subpart 1 of Part 4A of the Act (which includes rules or regulations for critical contingencies). Those provisions include the ability for rules or regulations to:

- (a) provide for 1 or more persons or bodies or groups of persons to carry out functions in relation to those regulations or rules, and for matters concerning their establishment, constitution, functions, members (including their appointment, removal, duties, and protection from liability), procedures, employees, administration and operation, funding by participants, and reporting requirements:
- (b) provide for systems, processes and procedures (including dispute resolution procedures), and the keeping, supply and disclosure of information, in relation to any matters specified in this subpart:
- (c) prescribe the form and manner in which information is to be disclosed:
- (d) require disclosed information, or information from which disclosed information is derived (in whole or in part), to be certified, in the prescribed form and manner, by persons belonging to any specified class of persons:

- (e) prescribe when and for how long information must be disclosed:
- (f) exempt or provide for exemptions (including provide for the revocation of exemptions), on any terms and conditions, of any person or class of persons from all or any of the requirements in regulations or rules made under this subpart:
- (g) provide for the supply of information for the purpose of administration and enforcement of this Act, and regulations and rules made under this Act:
- (h) provide for transitional provisions:
- (i) provide for any other matters contemplated by this Act or necessary for its administration or necessary for giving it full effect.

Conclusion

Gas Industry Co considers that the Act provides sufficient powers for the Minister to recommend the proposed Regulations which are the subject of this recommendation.

3.2 Requirements when recommending regulations

Section 43L - consultation

Section 43L(1) of the Act requires the body recommending gas governance regulations to the Minister to:

- undertake an assessment under section 43N of the Act; and
- consult with persons that the recommending body thinks are representative of the interests of persons likely to be substantially affected by the proposed regulations; and
- give those persons the opportunity to make submissions; and
- consider those submissions.

A summary of the consultation undertaken by Gas Industry Co is set out in section 6 of this recommendation.

Section 43N - identification and assessment of options

Section 43N(1) of the Act requires that, before making a recommendation to the Minister, Gas Industry Co must:

(a) seek to identify all reasonably practicable options for achieving the objective of the regulation; and

- (b) assess those options by considering
 - (i) the benefits and costs of each option; and
 - (ii) the extent to which the objective would be promoted or achieved by each option; and
 - (iii) any other matters that the industry body or the Commission considers relevant; and
- ensure that the objective of the regulation is unlikely to be satisfactorily achieved by any reasonably practicable means other than the making of the regulation (for example, by education, information, or voluntary compliance); and
- (d) prepare a statement of the proposal for the purpose of consultation under section 43L(1).

A summary of Gas Industry Co's identification and assessment of the options for critical contingency management arrangements is set out in section 5 of this recommendation.

Section 43N(2) – statement of proposal

Section 43N(2) requires that the statement of proposal referred to in section 43N(1)(d) must contain:

- a detailed statement of the proposal;
- a statement of the reasons for the proposal;
- an assessment of the reasonably practicable options, including the proposal, identified under subsection 43N(1); and
- other information that Gas Industry Co considers relevant.

A summary of the Statement of Proposal is set out in section 4 of this recommendation.

Conclusion

Gas Industry Co considers that it has complied with all of the requirements of sections 43L and 43N of the Act.

3.3 Rules or regulations

Under section 43Q of the Act, the Minister may make a rule for all or any of the purposes for which a gas governance regulation may be made. In deciding whether to make a rule rather than a regulation, the Minister must have regard to only:

- the importance of the rule, including whether the rule has a material effect on the rights and interests of individuals:
- the subject matter of the rule, including whether the rule contains detailed or technical matters rather than matters of general principle;
- the application of the rule, including:
 - whether the rule applies principally to a particular group (e.g., industry participants) rather than the general public;
 - whether the benefits of publication in accordance with section 43R of the Act rather than the Acts and Regulations Publications Act 1989 outweigh the costs of publication by that method; and
- the expertise and rule-making procedures of the recommending body.

Sections 43I to 43P continue to apply (with necessary modifications) as if the rule were a regulation. Section 43R applies to the method of making the rule:

- A rule may be made by the Minister publishing a notice in the Gazette that states:
 - the empowering provision for the gas governance regulation in relation to which the rule is made and a brief description of the nature of the rule;
 - where copies of the rule are available for inspection and purpose.⁴
- A rule comes into force 28 days after the date on which it is notified in the Gazette or on any later date stated in the notice.
- The Minister and Gas Industry Co must make all rules made under section 43Q available to the public by making copies of them available for inspection free of charge at the head office of the Ministry and Gas Industry Co, on the internet in a printable form, and for purchase at a reasonable price.

Gas Industry Co has concluded that the critical contingency management arrangements should be implemented by way of regulations under the Act for a number of reasons. The key management tool will be the curtailment of gas loads (as is the case under the existing industry plan, the NGOCP). Although this will generally be confined to larger industrial customers, it has the potential to involve broader sectors of the public, depending on the extent and duration of the event. The curtailment that may be required in times of critical

The notice in the Gazette need not contain the rule.

contingencies is likely to have a significant effect on the electricity generating sector⁵ and the effects of that may be widespread. In addition, an important component of the proposed arrangements is the settlement of contingency imbalances, between parties, at the critical contingency price. The establishment of the critical contingency price will rely on a process which is underpinned by matters of general principle rather than detailed, technical matters. These factors, taken together, indicate that these critical contingency arrangements are best implemented in the form of regulations under the Act.

3.4 Publication of notice in Gazette

Gas Industry Co must, no later than 10 working days after it gives a recommendation to the Minister for a gas governance rule or regulation, publicise that recommendation and the assessment completed under section 43N. This recommendation will be made available on Gas Industry Co's website and notified in the Gazette for that purpose. A copy of the Gazette and website notices are set out in Appendices 3 and 4 respectively.

The interdependency between the gas and electricity sectors has been the subject of work undertaken by an industry group convened by Contact Energy. Further information is available on Gas Industry Co's website at www.gasindustry.co.nz/Gas_Contingency_Management_Arrangements.php

4

Statement of Proposal

4.1 Framework of proposal

The Statement of Proposal dated August 2007 proposed the making of a recommendation to the Minister of Energy under the Act to introduce regulations for arrangements to manage critical contingencies. The Statement of Proposal contained a proposed framework and hierarchy as outlined in the table below:

Framework Hierarchy Level	Description
Gas Act	Empowering provisions in section 43F(2)(a)(vi) 'arrangements relating to outages and other security of supply contingencies'.
Critical Contingency Management Regulations	Establish regulations under the powers of sections 43F(2)(a)(vi) and 43S to provide for:
	a definition of a critical contingency and how it is triggered;
	a CCO to manage security of supply under critical contingencies;
	 powers for the CCO to direct some combination of suppliers, shippers, retailers and consumers during a critical contingency;
	a critical contingency price to cash-out any quantity mismatches;
	a requirement for each TSO to prepare a CCMP;
	criteria to be applied in the preparation of a CCMP;
	• required content of a CCMP;
	a process for consultation on the preparation of a CCMP;
	 publishing of a communications plan covering CCO/TSO communications;
	a process for approval of a CCMP; and
	maintaining, testing and reviewing CCMPs.
Critical Contingency	Each CCMP will be required to include:
Management Plan	the process to be followed during a critical contingency;
	a communications plan; and
	a process for terminating a critical contingency.

The measures proposed in the Statement of Proposal have been amended by Gas Industry Co to take into account submissions on the Statement of Proposal as well as subsequent submissions on the Supplementary Consultation Paper and the recent Short-form Consultation Paper.

4.2 Summary of measures in proposal

The proposed measures in the Statement of Proposal, as modified in the light of consultation responses and feedback from MED and the Parliamentary Counsel Office (PCO), are summarised below. These measures are provided for in the proposed Regulations which are the subject of this recommendation.

Preparations for critical contingency management

- Gas Industry Co to appoint a CCO.
- Gas Industry Co to publish the transmission networks covered by the Regulations.
- Each TSO is required to prepare a draft CCMP which includes the content specified in the Regulations, issue that draft plan for consultation, and then submit the final CCMP to Gas Industry Co for approval.
- Each CCMP must state the critical contingency thresholds that the CCO must be satisfied have been, or will be, breached before declaring a critical contingency. The proposed Regulations specify:
 - the allowable upper and lower time limits for the critical contingency thresholds in the CCMPs, i.e. the permissible range of lead-times before the minimum pressure values will be reached; and
 - the minimum pressure values below which it is unlikely that supply will be able to be maintained to the downstream distribution network (or customer, in the case of a direct connection).
- Gas Industry Co to appoint an Expert Adviser who is required to review any draft CCMP, consult with the CCO, have regard to any report provided by the CCO, and provide a recommendation to Gas Industry Co on whether to approve the CCMP.
- Gas Industry Co to approve a CCMP where it complies with the regulations, gives effect to the purpose of the regulations, and it has received a recommendation from the Expert Adviser that the plan be approved.
- To ensure that CCMPs are put in place in a timely manner, Gas Industry Co has discretion to amend and implement an initial CCMP if six months has passed from the 'commencement date' and the CCMP has not been approved.
- Each CCMP must be published by the CCO.
- CCMPs are required to be maintained and tested regularly.

Preparations for critical contingency management

- CCO to establish a website for the publishing of information relating to critical contingencies.
- CCO to coordinate with TSOs to prepare and publish a communications plan which governs communications during a critical contingency.
- CCO to publish an information guide which describes information flows between the CCO and a range of stakeholders.
- Retailers are required to provide information to the CCO on the aggregate volume of gas consumed by their customers within each curtailment band as well as volumes associated with essential service providers and minimal load consumers.
- Retailers are required to maintain emergency contact details for customers with annual consumption in excess of 2 TJ.
- Retailers are required to notify consumers and apply designation criteria to each consumer who requests to be classified as either an essential service provider and/or a minimal load consumer.

Proposed measures to improve critical contingency management

- CCO required to notify key parties, including electricity system operator when critical contingency declared.
- CCO has the power to direct curtailment of consumers of gas in accordance with the Regulations. The order of curtailment is provided for in the Regulations by reference to the level of consumers' annual gas consumption and any essential service provider or minimal load consumer designation.
- TSOs, retailers and consumers are required to comply with directions given by the CCO in respect of curtailment.
- Information is required to be provided both from the CCO to industry participants and stakeholders and from industry participants, particularly retailers, to the CCO.
- The Compliance Regulations are extended to cover the proposed Regulations.
- Provide incentives for parties to optimise security of supply by ensuring those who take gas to which they do not have title during a critical contingency are required to pay for that gas at a market-reflective price.
- Incentives are provided for parties, who are able, to maximise supply during a critical contingency by ensuring that supply which is maintained or increased and which assists in managing the critical contingency is paid for at a market-reflective price.
- The order in which curtailed consumers of gas may be restored is specified and the circumstances where there is discretion for varying that order are limited.

Proposed measures to improve critical contingency management

- Exercises are required to be conducted at regular intervals to test the processes and procedures and to report on the effectiveness of the arrangements.
- Incident reports and monitoring of CCO performance provide a continuous improvement process.

Proposed process for appointment of Critical Contingency Operator

- Gas Industry Co is required, initially, to appoint the system operator for both transmission systems as the CCO (Vector Limited is the current system operator for both the Maui and Vector gas transmission systems).
- The service provider agreement must include the terms and conditions required by the regulations, including terms relating to remuneration, liability cover, testing of plans and procedures, and performance standards.

Proposal to establish effective governance arrangements

- Gas Industry Co responsible for appointment of:
 - Expert Advisor for reviewing CCMPs;
 - Industry Expert for calculation of critical contingency price; and
 - CCO.
- Arrangements to be funded by everyone who purchases gas from producers.
- Gas Industry Co oversees the creation and updating of CCMPs.
- Gas Industry Co responsible for assessing CCO reports and performance standards.

Proposal to establish effective audit arrangements and means of compliance

• Gas Industry Co may audit the information which a retailer has provided to the CCO to determine whether the information is materially correct.

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Assessment

Section 43N of the Act requires that, before making a recommendation to the Minister, Gas Industry Co must assess:

- the costs and benefits of each reasonably practicable option, including the proposal; and
- the extent to which the regulatory objective ('to achieve the effective handling of a national or regional critical gas contingency without compromising long-term security of supply') would be promoted or achieved by each option; and
- any other matters which Gas Industry Co considers relevant.

5.1 Identification of reasonably practicable options

Gas Industry Co's analysis identified four key problem areas with the current contingency management arrangements.

- 1. The current arrangements rely on voluntary co-operation, therefore the transmission system is vulnerable to parties not complying with requests from the system operator to curtail load. This risk is heightened by the fact that Phase 2 of the NGOCP (largely equivalent to the trigger level for a 'critical contingency' under the proposed regulated arrangements) is only triggered as a result of those parties who have earlier lost supply not complying with their obligations under MPOC to balance their positions and, thereby, precipitating a Phase 1 alert. In addition, those parties have not rectified the situation during Phase 1, conditions have further deteriorated, giving rise to the need to activate Phase 2.
- 2. The NGOCP was conceived prior to the introduction of open access on the Maui pipeline. It was revised in 2005 to make the changes required to recognise that the Maui pipeline had been opened to transport gas other than that from the Maui field. Thus the NGOCP has a somewhat Maui-centric perspective and the industry could benefit from a broader-based set of arrangements which recognise the changes that have taken place since the NGOCP was established.

- 3. There is a lack of legal clarity of roles and responsibilities. These include:
 - no clearly-defined role for someone to act in a role equivalent to the CCO;
 - significant ambiguity exists regarding any requirement for participants to follow requests from the system operator (i.e. whether such requests can effectively override the retailers' contracts); and
 - it is not clear that requests from the system operator under a voluntary arrangement will be sufficient to relieve participants of any consequential liability when acting to curtail gas demand.
- 4. The last, and possibly most important, weakness is the lack of any commercial incentives associated with the NGOCP. Curtailment is determined largely by plant size which means those who are asked to curtail may not, themselves, have lost supply. Similarly, there will be parties who are not curtailed even though their supplier has ceased supplying. Therefore, once curtailment has commenced, there will be a mix of parties who are being denied access to their own gas and others who are effectively being given a free ride (although they will have an obligation to 'pay back' those volumes of gas after the event).

However, there is no price mechanism associated with these arrangements and, therefore, no incentive for parties to arrange their affairs so as to optimise the trade-offs between price and security of supply.

In its review, Gas Industry Co considered the most reasonably practicable options in respect of each of the problem areas summarised above.

The Statement of Proposal identified the possible mechanisms for implementing critical contingency management arrangements as:

- a continuation of the status quo;
- a multi-lateral industry agreement (or pan-industry agreement); and
- rules or regulations under the Act.

Status quo is not an option

The Statement of Proposal concluded that any mechanism to implement arrangements for critical contingency management needed to be mandatory and that a continuation of the status quo would fail to meet the requirements for effective management of a critical contingency.

Further analysis, supported by many submissions on the July 2006 discussion paper, suggested that retaining the status quo failed to meet the regulatory objective because the existing arrangements are ambiguous, lack enforcement provisions, and may not optimise security of supply during a critical gas contingency. The shortcomings in those arrangements may also create problems for future security of supply.

Gas Industry Co concluded that the status quo was not a reasonably practicable option and should not be considered further.

An industry agreement provides an uncertain outcome

Developing an industry agreement was also considered in both the Statement of Proposal and the July 2006 discussion paper. Those documents concluded that pan-industry arrangements are also unlikely to achieve the regulatory objective given the:

- difficulty in reaching consensus to allow execution of a pan-industry agreement that is legally binding;
- nature of provisions that would need to be included;
- diverse nature of the parties that would be required to agree the provisions to be included in a pan-industry agreement and the fact that they include direct competitors;
- inability to compel new participants to execute and join a pan-industry agreement; and
- possible Commerce Act risks associated with such an agreement.

Gas Industry Co concluded that a pan-industry agreement failed to meet the regulatory objective because it required either a consensus to be reached among industry players, or for boycott arrangements⁶ that would effectively bind all industry participants.

Even if a consensus was able to be reached, or a boycott arrangement agreed, there remained a risk that any agreement reached by the industry for managing critical contingencies could not override existing contracts, or could not be readily implemented. The likelihood remained that one or more of the required parties would simply have been unable to enter into such an agreement⁷ and/or that the agreement required Commerce

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A boycott arrangement could be implemented by seeking the agreement of the monopoly network providers to include, as a requirement of access, that participants are required to comply with certain critical contingency management arrangements. However, there is the potential for such an approach to grant undue leverage to the network owners used to implement the boycott. In addition, such an approach is ineffectual in binding parties who are not transmission customers.

For example, one stakeholder advised that it may be prevented from entering into an agreement requiring it to comply with curtailment instructions unless the existing agreements with its customers permitted such action. Clearly, if a company's own gas supply had been lost it would be able to curtail its customers, citing force majeure. But the arrangements which are being put in place are designed to encompass the situation where the loads curtailed do not necessarily relate to the retailers who have lost supply.

Commission approval. Additionally, any new entrant would need to be willing to enter into such an agreement and that could present difficulties. Finally, the cost of enforcement and the difficulties in assigning penalties under a pan-industry agreement suggested that a pan-industry agreement remained vulnerable to shippers and/or consumers failing to comply when notified to curtail demand.

Gas Industry Co concluded that a pan-industry agreement was not a reasonably practicable option and should not be considered further.

Rules or regulations under the Act

The Statement of Proposal concluded that the most practicable means of making critical contingency management arrangements mandatory, and removing doubt about compliance with the arrangements during a critical contingency, was to implement them within a framework of regulations (and/or rules) under the Act.

Gas Industry Co has therefore developed a proposal where the arrangements for critical contingency management are primarily set out in regulations. The proposed approach combines the application of regulations with a requirement for industry participants to develop much of the detailed planning and arrangements to apply during a gas contingency. Thus the proposal represents somewhat of a hybrid between a fully-regulated set of arrangements and a pan-industry agreement.

The proposed Regulations will set out the roles and responsibilities of participants, powers to direct curtailment during a gas contingency, and provide a requirement for the TSOs to develop CCMPs. The CCMPs will be developed by the TSOs in consultation with all affected stakeholders.

The framework for the proposal is described in section 4 of this paper. Gas Industry Co has concluded that the proposal is the best reasonably practicable option to meet the regulatory objective.

Counterfactual—a more prescribed set of regulations

Gas Industry Co has further concluded that the only other reasonably practicable alternative to the proposal is to fully prescribe critical contingency arrangements in regulations and rules under the Act. This would involve setting out in regulations and/or rules the detail that would otherwise be included in the CCMPs.

Thus there is a potential choice between the mix of regulation and industry arrangements proposed in this paper and a more fully-prescribed approach.

The advantage of the proposal is that the scope for industry involvement in the operational details is maximised while removing the legal uncertainties associated with the status quo.

The more fully-prescribed approach requires Gas Industry Co, with support from industry participants, to set out detailed arrangements in regulations and rules. This has two key disadvantages as it:

- covers detailed operational matters on which Gas Industry Co staff are not necessarily expert; and
- requires a high level of detail, to fully prescribe the critical contingency arrangements, to be set out in regulations and rules.

This approach will incur significantly increased costs in deriving the necessary detail. Prescribing the detail in advance has the drawback that it will be difficult to incorporate industry expertise at the time the regulations and rules are activated and that is likely to make the arrangements less responsive.

The cost-benefit analysis, required for inclusion in the Statement of Proposal, assesses the proposal using the more fully prescribed regulatory approach as the counterfactual.

A summary of the analysis is set out in the following table:

Options	Analysis
Status Quo	Does not achieve the regulatory objective.
	Inefficiencies due to the lack of any pricing signal which is likely to encourage free-riding.
	May incentivise parties who are curtailed to also curtail gas supplies to minimise financial exposure, thereby, exacerbating severity of the contingency.
	Vulnerable to withdrawal or non-compliance by one or more parties.
Pan industry agreement	Ideally, should be able to address the inefficiencies associated with the status quo.
	Presupposing agreement on the mechanism, can incorporate pricing arrangements to increase efficiency.
	Most significant drawback is reaching and maintaining agreement across the industry. Vulnerable to hold-out from one or more parties (and the compromises required to reach agreement will detract from efficiency).
	Compliance and enforcement more difficult to achieve compared with regulated option(s).

Options	Analysis
Regulated arrangements for critical contingency management	Achieves regulatory objective. Hybrid option allows for maximising input of industry expertise and experience.
	Strong compliance and enforcement optimises outcomes.
	Comparison of hybrid option and more fully prescribed option suggests the latter is least preferred, mostly due to loss of flexibility and adaptability to changing circumstances.

The detailed results of Gas Industry Co's assessment of the extent to which each of the options achieves the regulatory objective are set out in Appendix 1.

Having considered all the submissions, Gas Industry Co concluded that the best reasonably practicable option to achieve the regulatory objective was to develop regulations to govern critical contingency management arrangements that incorporate all of the matters summarised above.

5.2 Cost benefit analysis

Gas Industry Co engaged NZIER to perform an assessment of the costs and benefits of the proposals. The NZIER cost-benefit study was published in the Statement of Proposal (Appendix A in that Proposal). Relative to the counterfactual (of a more fully-prescribed set of regulation and rules), the proposal being recommended by Gas Industry Co offers:

- slightly lower development costs;
- materially lower establishment costs;
- slightly lower future amendment costs;
- similar compliance and enforcement costs;
- potentially significant contingency benefits⁸; and
- similar efficiency benefits⁹.

Overall the NZIER Report concludes that the proposal provides modest present value net benefits over the counterfactual totalling between \$0.762m and \$6.907m, depending

⁸ Potentially shorter, smaller gas outages, having lesser impacts on industry participants and gas users.

Confidence in the reliability of gas supply and the certainty of the arrangements would be similar and would result in similar levels of efficiency and incentives to invest in security of supply.

upon the assessment of contingency benefits. Under a range of sensitivities the proposal remains of positive net benefit relative to the counterfactual.

Gas Industry Co has concluded that the net benefits (benefits less costs) of the proposal are materially higher than the net benefits of the counterfactual.

Gas Industry Co does not consider that there are any other matters relevant to its assessment of the reasonably practicable options.

5.3 Conclusion

Having concluded the process outlined above, Gas Industry Co believes that:

- the status quo option does not meet the regulatory objective and is not a reasonably practicable option; and
- the pan industry agreement may not meet the regulatory objective unless retailers were able to adjust any contracts that would currently prevent them entering into such an arrangement. The pan industry agreement will incur greater costs than a regulatory arrangement due to the need for industry agreement and possible authorisation or clearance from the Commerce Commission. It is likely to take longer for benefits to accrue due to delays in implementation and it is always at risk from the possibility of one or more parties holding out. In addition, there are greater challenges in enforcing compliance with an industry agreement and that may be regarded as weakening the effectiveness of such an arrangement.

Therefore, Gas Industry Co has concluded that the reasonably practicable option which best meets the regulatory objective is to develop rules or regulations to govern critical contingency management.

6 Consultation

Section 43L of the Act requires Gas Industry Co to:

- consult with persons that Gas Industry Co thinks are representative of the interests of persons likely to be substantially affected by the proposal;
- give those persons the opportunity to make submissions; and
- consider those submissions.

6.1 Documents issued for consultation

A number of documents have been issued in the process of developing this recommendation. The first document was issued in July 2006¹⁰ and discussed the framework for analysis and a proposed approach for dealing with the issues. Feedback on that paper caused Gas Industry Co to revise its approach and that resulted in a series of consultations, described below, which led to this recommendation.

Statement of Proposal

A Statement of Proposal was issued in August 2007 and submissions were sought from all of the persons listed in Appendix 2. Submissions on the Statement of Proposal paper were received from seven industry participants:

- Contact Energy Ltd;
- Genesis Power Ltd;
- Maui Development Ltd;
- Methanex New Zealand Ltd;
- Mighty River Power Ltd;

Discussion Paper—Review of Gas Emergency Arrangements, July 2006, available at www.gasindustry.co.nz/ Previously_consulted.php.

- Nova Gas Ltd; and
- Vector Ltd.

The industry submissions demonstrated clear support for some form of mandatory arrangements and majority support for a regulatory framework to cover critical contingency management. However, there was continuing disagreement in relation to some detailed technical matters e.g. the mechanics of the most appropriate imbalance methodology. The key issues and areas of stakeholder disagreement, and the conclusions reached by Gas Industry Co in respect of each of them, are summarised in section 6.2 below under the heading 'Statement of Proposal'.

Supplementary consultation paper

Following the submissions analysis on the Statement of Proposal an industry workshop was held in November 2007 to discuss the amendments which Gas Industry Co was proposing to address the issues raised in submissions. In December 2007 a further paper was released for consultation: Gas Outage and Contingency Management Arrangements—Supplementary Consultation Paper.

Submissions were received from the seven parties that responded to the earlier Statement of Proposal and from Wanganui Gas Ltd (Energy Direct NZ).

The key issues and areas of stakeholder disagreement, and the conclusions reached by Gas Industry Co in respect of each of them, are summarised in section 6.2 under the heading Supplementary consultation paper.

Short-form consultation paper

Following release of the Supplementary Consultation Paper, Gas Industry Co also had discussions with MED and PCO regarding the structure and content of the draft regulations. Issues were identified that required amendments to the proposed Regulations, some of which warranted further consultation.

In addition, the submissions on the Supplementary Consultation Paper indicated that further revision to the proposed arrangements was required and these revisions would also be subject to consultation. In May 2008 Gas Industry Co released *Gas Critical Contingency Management Arrangements – Short-form Consultation Paper*.

Submissions were received from nine parties (the eight parties identified above plus Powerco Ltd) and these are also summarised in section 6.2 under the heading *Short-form Consultation Paper*.

6.2 Key issues and responses arising from consultation

Statement of Proposal

The key issues and areas of stakeholder disagreement, and the conclusions reached by Gas Industry Co in respect of each of them, are summarised in the table below. On many of these issues, fuller explanation of Gas Industry Co's reasons for its approach is presented in the *Submissions Analysis and Next Steps* paper which was published in October 2007.

Issue	Change to Statement of Proposal
Deadlock in CCMP preparation	The Statement of Proposal included a process which provided for Gas Industry Co to approve each CCMP on the recommendation of the CCO and an Expert Adviser. It was possible for a deadlock situation to evolve if Gas Industry Co declined to approve, and the TSO refused to amend, a draft CCMP. The proposed Regulations were amended to incorporate a power for Gas Industry Co to amend a CCMP and approve it if 6 months has elapsed without a plan being approved.
Imbalance calculations	The proposed Regulations incorporated provisions for parties who suffer mandatory curtailment of their gas entitlements during a contingency to be paid from a pool which is funded by the parties who used gas to which they had no entitlement. This requires a calculation of imbalance quantities during the period of any critical contingency. There is some complexity involved in specifying how these calculations should be carried out. The proposed Regulations were amended so that, rather than specify these complexities in the Regulations, only the general principles for the calculation of the imbalances would be specified. Accordingly, the details regarding the calculation of the imbalances will be developed by each TSO as part of the development of its CCMP.
	This has several advantages including: the potential to dovetail the arrangements with existing systems and processes wherever possible; an easier process to change and adapt the details as other industry arrangements develop; and exposure to industry scrutiny through the CCMP consultation process.
Critical contingency price	The Statement of Proposal incorporated a set of criteria for an industry expert to take into account in determining the contingency price. Submissions highlighted some deficiencies in this area. The proposed Regulations were amended to replace the criteria with an overarching principle to the effect that 'the gas contingency price must be set at a level that reflects the price that would be established by an efficient short-term market that allocated scarce gas resources to the highest value uses during the contingency.'
	When setting the contingency price, the industry expert must also take into account the prices in the electricity wholesale market during the critical contingency and the economic costs of the loss of supply to consumers who have had their gas supply curtailed.

MED was asked to review the proposed Regulations and that request identified a number of areas which merited further examination:

- whether Gas Industry Co should have an ability to obtain injunctive relief in an emergency situation;
- clarification over whether the Act would allow the proposed Regulations to require domestic consumers to curtail demand;
- whether the thresholds for the onset of a critical contingency needed to be set out in the proposed Regulations rather than in the CCMPs; and
- the appropriateness of Gas Industry Co being able to publish additional curtailment guidelines.

These matters were all raised in the Supplementary Consultation Paper.

Supplementary Consultation Paper

The key issues and areas of stakeholder disagreement, and the conclusions reached by Gas Industry Co, are summarised in the table below. On many of these issues, fuller explanation of Gas Industry Co's reasons for its approach is presented in the *Supplementary Submissions Analysis* paper which was published in March 2008.

Issue	Change to proposed regulations
Critical contingency thresholds	There was broad support for the critical contingency thresholds to be established through the development of the CCMPs. This was preferred to having them set in the proposed Regulations because it would allow for them to evolve readily in response to system changes over time.
	Further legal analysis concluded that it was an inappropriate sub-delegation of powers to leave the thresholds to be established solely in the CCMPs outside the regulatory framework. However, it was determined that this problem could be addressed through a hybrid approach in providing bounds in the proposed Regulations on the level of discretion permitted in respect of the thresholds in the CCMPs.
Application to domestic consumers	The Act is silent on the ability of regulations to implement emergency arrangements on those who fall outside the ambit of the wholesale market, such as domestic consumers. However, it is impracticable for gas supply to be physically curtailed at the wholesale level alone, due the risks of depressurisation to transmission and distribution systems. As such, broader intervention may be occasionally necessary and medium to smaller consumers may be required to curtail demand. Nevertheless, to mitigate any concerns here, the proposed Regulations have been amended to exclude their application to domestic consumers.

Issue	Change to proposed regulations
Imbalance calculations	It was proposed to develop the details of the imbalance calculations as part of the development of CCMPs, once the proposed Regulations had been approved.
	The level of support for this approach was mixed, with submitters having different views and several being reluctant to allow resolution of this matter to wait until after the proposed Regulations are in place.
	Gas Industry Co addressed this by placing this work on the agenda of the Contingency Management Implementation Group. That group identified the key areas for inclusion in the proposed Regulations and, accordingly, the proposed Regulations have been amended to:
	require that a sub-daily period be used for calculating imbalances if possible; otherwise a daily period (the existing industry practice) is to be used; and
	specify how a change in linepack during a critical contingency will be treated for the purpose of calculating the contingency imbalance.
	Feasibility of the calculation of imbalances over a sub-daily period will be addressed through CMIG.
Critical contingency price	There was broad support for the overarching principle for setting the critical contingency price (CCP). However, there were divergent views on how the CCP should be determined and whether it should be set ex-ante or ex-post. Several submitters sought further work on the pricing mechanism before the arrangements are recommended to the Minister.
	Gas Industry Co is satisfied that pricing mechanism for the CCP in the proposed Regulations is appropriate. Gas Industry Co considers that no better alternative to ex-post pricing has been put forward by submitters and that the proposed approach of ex-post pricing is preferable. There will inevitably be an aspect of uncertainty in the determination of the CCP. However, that uncertainty is mitigated by the proposed Regulations requiring the industry expert to:
	• use the electricity wholesale market to impute the CCP if only large consumers (>15TJ per day, including gas-fired electricity generation) are curtailed; or
	• in other situations, base the CCP on the economic cost to the marginal consumer curtailed.

Short-form consultation paper

The table below summarises the key issues raised by submitters on the short-form consultation paper and the consequential changes to the proposed Regulations. A formal submissions analysis paper was not published as the short-form consultation paper focussed on a narrowly-defined set of issues which have been addressed in this recommendation and through CMIG. Copies of the submissions are available on the Gas Industry Co website.

Issue	Change to proposed regulations
Critical contingency thresholds	Following the decision to provide for bounds for the critical contingency thresholds (as set in the CCMPs), the proposed Regulations were amended to specify an upper and a lower limit for each of the thresholds. The limits provided a permissible range of minimum operating pressure values and time to minimum operating pressure thresholds for the relevant parts of the transmission system. Submissions were generally supportive of the values and thresholds indicated and no concerns were raised regarding the potential ranges for those values and thresholds.
Imbalances	Submitters supported the inclusion in the proposed Regulations of a provision allowing the correction of errors in allocated contingency imbalances, and the technical amendments made to the calculation of contingency imbalance provisions. Some submitters also expressed interest in the detail of contingency imbalances being provided for in the CCMPs. Gas Industry Co acknowledges this detail is a vital part of the settlement of the inadvertent trading which occurs during critical contingencies and has engaged CMIG to assist in developing this detail in the CCMPs.
Determining the critical contingency price	The proposed Regulations were amended to allow for additional comment from affected parties before the CCP is formally determined. Submissions generally supported this approach and it has been retained.
Designation of essential service providers and minimal load consumers	The proposed Regulations included an appeal process to Gas Industry Co for those consumers who dispute their designation by retailers. There was general agreement on an appeal process, though some submitters wanted a more comprehensive arrangement than that proposed. Gas Industry Co does not consider further arrangements are justified here, particularly given the existing application of the Compliance Regulations to such designations.

The consultation process also identified additional issues which should be included within CMIG's ambit. The 'pre-critical' components of the NGOCP provide one such example¹¹.

6.3 Conclusion

Gas Industry Co considers it has complied with its obligations under section 43L of the Act. In addition to the consultation processes outlined in detail above, Gas Industry Co has also held four industry workshops on the proposed arrangements in July 2006, May 2007, August 2007 and November 2007. Further, Gas Industry Co has frequently met with various industry participants to discuss their views on the proposed arrangements and to obtain clarification. Since April 2008, Gas Industry Co has also been engaging and

The proposed arrangements are not a complete replacement for the NGOCP. For example, Phase 1 of the NGOCP deals with communicating to parties that supply is tight and they should make preparation in case things get worse. There is no equivalent for this in the proposed Regulations (as there is no need for compulsion to undertake what is an entirely sensible commercial and operational step).

consulting with CMIG on matters concerning the implementation and refinement of the proposed Regulations.

Industry participants strongly support the need for mandatory critical contingency management arrangements. While particular matters of detail remain contentious, this is inevitable in arrangements which involve a step-change from a status quo which involves an element of free-riding by some industry participants. In order to ensure that sound arrangements are put in place such that critical contingencies are managed efficiently, it is clear that sensible compromises need to be made. As the work of CMIG continues, and the proposed arrangements are better understood by industry participants, it is expected that a higher degree of consensus will be achieved.

The changes to the arrangements that have come about through the consultation process have lead to a set of arrangements which are more robust and effective. In addition Gas Industry Co does not consider the changes materially affect the cost benefit analysis undertaken at the time of the Statement of Proposal. The overall conclusion of the NZIER Report—that the net benefits of the proposal are materially higher than the net benefits of the counterfactual—remains unchanged.

Gas Industry Co's view is that the proposed Regulations represent a robust solution and that the proposal is the reasonably practicable option which best meets the regulatory objective.

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Potential Risks

7.1 Key risks

The key risks with the proposal which have been identified by Gas Industry Co are:

- delays in approval of CCMPs result in a delay to the new arrangements taking effect;
- changes to MPOC/VTC (if required) to ensure a smooth transition to the new arrangements are not forthcoming;
- retailers failing to take mitigating actions and risking an adverse financial impact as a result; and
- challenge from an industry participant on the need for further consultation.

Delays in approval of CCMP result in delays to new arrangements taking effect

The new arrangements come into effect in two stages: the 'commencement' date starts the preparations and consultation on CCMPs then, once the CCMPs have been approved (the 'go-live' date), the new arrangements to manage critical contingencies kick-in. A delay in the approval of CCMPs would delay the 'go-live' date.

Based on the stakeholder submissions the area of the CCMPs that has the highest risk of delay is the details of the calculations to be performed by the TSOs for the determination of contingency imbalances. These processes are new and as yet untested but will be developed in an open process and subject to industry consultation. CMIG will work on the details of the calculation of contingency imbalance in advance of the proposed Regulations coming into force.

If the TSO is unable to develop a plan that is acceptable to the Expert Adviser and to Gas Industry Co, there is deadlock breaker whereby Gas Industry Co can make changes to a TSO's CCMP and then approve the amended plan. It is likely this would only be used as an option of last resort and Gas Industry Co anticipates the CCMPs can be finalised without

resorting to the use of the deadlock breaking provisions. However, the existence of the deadlock provision should provide an incentive for this to happen.

Changes to MPOC/VTC (if required) are not forthcoming

MPOC and VTC currently provide the commercial arrangements for normal operating conditions. When a critical contingency is triggered the normal commercial arrangements for gas nominations and balancing will be temporarily suspended for the period of the critical contingency and will be re-activated at the point that the critical contingency is terminated.

Unlike the new arrangements, the NGOCP provides a bridge for the transition period between normal commercial arrangements and contingency arrangements in an outage situation (NGOCP Phase 1). There is no equivalent to NGOCP Phase 1 under the new arrangements.

As yet the industry has not identified anything specific that needs to be changed under MPOC/VTC and there is a view that the necessary Phase 1 arrangements are largely provided for directly in MPOC and VTC. Nonetheless it is possible that changes will be required to MPOC/VTC to ensure a smooth transition to the critical contingency arrangements.

To mitigate any perceived risk, CMIG will examine the issues of the transition between normal commercial arrangements and a critical contingency and consider any changes required, including an early warning mechanism. CMIG will make a recommendation to the TSOs if it identifies any changes that are needed to MPOC/VTC to ensure smooth transitions between MPOC/VTC and the new critical contingency arrangements. Similarly, CMIG will make a recommendation to Gas Industry Co if there are other aspects which need to be addressed outside of MPOC and/or VTC.

Retailers failing to take mitigating actions and risking an adverse financial impact as a result

One retailer has highlighted a danger that it faces unknown financial consequences as a result of the settlement of contingency imbalances. The imbalances faced by a retailer after a critical contingency will depend largely on the availability of its supply during the critical contingency and on whether it has customers that have been curtailed.

In order to mitigate its exposure a retailer could take a number of steps to proactively manage its exposure: it could pre-contract with other parties for extra gas in a critical contingency situation; it could contract for additional supply e.g. production or storage; or ensure its contracts with its consumers allow it to curtail demand in the event of a critical

contingency that affected its supply. Thus, there is a range of measures available to a retailer who faces exposure and who wishes to manage their risk. This will require them to pre-contract for commercial arrangements ahead of the proposed Regulations coming into effect (which is unlikely to be before the second quarter of calendar 2009).

Challenge from an industry participant on the need for further consultation

As discussed in section 6, there have been refinements made to the proposed Regulations at each stage in the consultation process since the release of the Statement of Proposal in August 2007. While Gas Industry Co has consulted on these refinements, there remains a small risk that a participant may challenge the proposed Regulations based on a perceived lack of compliance with s43L. Such a challenge would likely focus on the aspects of the proposed Regulations that have been amended since the release of the Short-form Consultation Paper. The two most significant amendments are:

- curtailment instructions for large consumers will be communicated directly by the CCO (whereas retailers pass on curtailment instructions to other consumers); and
- the proposed Regulations now require that TSOs make transmission system information available to the CCO (as TSOs currently do to the system operator) for the purposes of enabling the CCO to carry out its obligation under the proposed Regulations.

Gas Industry Co is confident that it has met its consultation obligations and considers the risk of successful legal challenge to be low. In particular, Gas Industry Co believes the changes made to aspects of the proposed Regulations were made in accordance with proper consultation process and in response to the views of industry participants, MED and PCO. Those affected by the two most significant amendments have been directly engaged with by GIC, and all amendments have been raised with industry participants via CMIG. These steps are in addition to the extensive consultation on the proposed Regulations that has been carried out since mid-2006 (as outlined in section 6).

7.2 Conclusion

Gas Industry Co considers that these risks are not sufficient to detract from the overall benefits of the proposal. Also, the risks of not proceeding with the proposal need to be taken into account.

The existing industry arrangement, the NGOCP, is vulnerable to non-compliance by virtue of being a voluntary arrangement. Indeed, compliance is mixed under the contractual arrangements which exist for the Maui pipeline thus demonstrating that stronger incentives and firmer back-stop arrangements are required.

This proposal represents a significant improvement on the status quo. Moreover, in making this recommendation, Gas Industry Co is confident that the proposed approach will provide much greater certainty in managing critical contingencies, will improve incentives for gas industry participants overall, and will materially assist in meeting the Government's objectives for the gas industry.

8

Gas Act objectives and MED consultation

8.1 Consideration of Gas Act objectives

The GPS sets out the Government's objectives and outcomes for governance of the New Zealand gas industry, and its expectations for industry action. Under section 43ZO of the Act, Gas Industry Co must have regard to those objectives and outcomes when making recommendations for gas governance rules or regulations.

The Government's overall policy objective for the gas industry, as stated in the Act and the GPS, is:

To ensure that gas is delivered to existing and new customers in a safe, efficient, fair, reliable, and environmentally sustainable manner.

Section 43ZN of the Act sets out the other objectives which are:

- (i) the facilitation and promotion of the ongoing supply of gas to meet New Zealand's energy needs, by providing access to essential infrastructure and competitive market arrangements:
- (ii) barriers to competition in the gas industry are minimised:
- (iii) incentives for investment in gas processing facilities, transmission, distribution, energy efficiency and demand-side management are maintained or enhanced:
- (iv) delivered gas costs and prices are subject to sustained downward pressure:
- (v) risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties:
- (vi) consistency with the Government's gas safety regime is maintained.

The 2004 GPS was the applicable GPS under which the critical contingency arrangements were developed until April of this year. Paragraph 5 of the 2004 GPS set out, consistent with the overall objective and the other objectives in the Act, certain other specific outcomes that the Government is seeking. The key outcome specified for critical

contingency management, and also specified in section 43ZN of the Act, is that 'risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties'. Other relevant specific outcomes include:

- (b) Energy and other resources are used efficiently;...
- (e) The full costs of producing and transporting gas are signalled to consumers;...
- (i) Consistency with the Government's gas safety regime is maintained.
- (j) The gas sector contributes to achieving the Government's climate change objectives by minimising gas losses and promoting demand-side management and energy efficiency.

The current 2008 GPS repeats the same overall policy objective for the gas industry as set out in the 2004 GPS, as well as the same specific objective regarding the proper and effective management of risks relating to security of supply. However, the specific outcome sought by the Government for critical contingency management is even more clearly expressed in paragraph 13 of the current GPS. Paragraph 13 provides:

Sound arrangements for the management of critical gas contingencies.

Other relevant, specific policy objectives are set out in paragraph 12 to include:

(a) Energy and other resources used to deliver gas to consumers are used

- efficiently;...

 (c) The full costs of producing and transporting gas are signalled to
- (c) The full costs of producing and transporting gas are signalled to consumers;...
- (e) The gas sector contributes to achieving the Government's climate change objectives as set out in the New Zealand Energy Strategy, or any other document the Minister of Energy may specify from time to time, by minimising gas losses and promoting demand-side management and energy efficiency.

Gas Industry Co considers the proposed Regulations are consistent with the objectives set out in the Act and GPS, as described above. The proposed Regulations are considered to provide for sound management of critical gas contingencies, and will help ensure that gas is delivered to customers in a safe, efficient, fair, reliable, and environmentally sustainable manner.

The regulatory objective of the Statement of Proposal, as modified in response to submissions, is: 'to achieve effective handling of a national or regional critical gas contingency without compromising long-term security of supply'. Further, that such arrangements should:

- explicitly recognise the value of gas during critical contingencies and include provisions for parties to pay, and be paid for, inadvertent gas trades;
- provide incentives for parties to factor in security of supply as one of the inputs for business planning;
- be transparent and provide for reasonably predictable outcomes in the way that critical contingencies are managed; and
- wherever possible, be compatible with the commercial arrangements that operate under 'business as usual' circumstances.

Gas Industry Co's detailed analysis of the proposal against the regulatory objective is set out in Appendix 1. This concludes that establishing the critical contingency management arrangements in accordance with this recommendation is the most reasonably practicable option for delivering the regulatory objective.

8.2 Consultation with MED

Representatives of MED have been briefed regularly by Gas Industry Co on the development of both the critical contingency management arrangements and the associated compliance and enforcement arrangements. MED has been issued with all relevant documents in conjunction with the industry stakeholders identified in Appendix 2.

Detailed discussions occurred with MED in December 2007 and the first quarter of 2008 and full account was taken of those discussions in preparing the proposed Regulations and this recommendation. Consultation has also occurred with PCO to ensure the proposed Regulations are satisfactory for their purposes.

MED officials were provided with a copy of this recommendation prior to it being approved by the Gas Industry Co Board for release to the Minister. Comments from MED have been taken fully into account in preparing this recommendation.

8.3 Communications

In accordance with section 430 of the Act, Gas Industry Co intends to publish, within 10 working days after giving it to the Minister, this recommendation and the assessment completed under section 43N in both the Gazette and on the Company's website.

The notice of recommendation to be published in the Gazette is attached as Appendix 3. A draft of the notice to be published on Gas Industry Co's website is attached as Appendix 4.

Gas Industry Co also intends to notify all stakeholders of the fact that this recommendation has been made and that it is viewable on its website.

9

Recommendation

Gas Industry Co recommends to the Minister of Energy, under sections 43F(2)(a)(vi) and 43S of the Gas Act 1992, the making of the Gas Governance (Critical Contingency Management) Regulations attached as Appendix 5 to this recommendation.

Appendix 1: Analysis of reasonably practicable options against the regulatory objective

Reasonably Practicable Options

Gas Industry Co has a number of choices in recommending gas governance arrangements. These range from industry arrangements, which may be underpinned by contracts, through to formal rules and/or regulations under the Act. The selection of the particular instrument to use is driven in large part by the form of the solution and which instrument is likely to provide the most effective implementation having regard to the objective of the governance arrangements.

Section 43N of the Act requires the Gas Industry Co, prior to making a recommendation to the Minister of Energy, to seek to identify all reasonably practicable options, to assess the costs and benefits of each option, and to ensure that the objective of the regulation is unlikely to be satisfactorily achieved by any reasonably practicable means other than the making of the regulation.

Section 5 of this paper considered these issues.

Options Considered

Section 5 identified the reasonably practicable options for implementing critical contingency management arrangements as:

- a continuation of the status quo; or
- a multi-lateral industry agreement (or pan-industry agreement); or
- rules or regulations under the Act.

These options were tested against the regulatory objective in order to determine which option would best meet the objective.

Regulatory Objective

Following submissions on the August 2007 Statement of Proposal, Gas Industry Co concluded that the regulatory objective should be:

To achieve effective handling of a national or regional critical gas contingency without compromising long-term security of supply.

The first part of the objective is self-evident. The second part of the objective addresses the risk that ineffective short-term arrangements can lead to unintended consequences and problems with longer-term security of supply. The lack of an appropriate cash-out arrangement in the existing arrangements is considered to be a case in point.

Option 1 - Status Quo

The Statement of Proposal concluded that any mechanism to implement arrangements for critical contingency management needed to be mandatory and that a continuation of the status quo would fail to meet the requirements for effective critical contingency management. Gas Industry Co does not consider that continuation of the status quo is a reasonably practicable option as it fails to deliver the regulatory objective. However, analysis of the status quo is presented below for completeness.

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Regulatory objective	Effective handling of a national or regional critical gas contingency without compromising long-term security of supply.	No	Fails to meet the regulatory objective because the existing arrangements are ambiguous, lack enforcement provisions, and may not optimise security of supply during a contingency. The shortcomings in those arrangements may also create problems for future security of supply.
Efficiency	The arrangements for handling a gas contingency provide efficient outcomes.	No	Fails to meet the efficiency objective because the status quo does not provide efficient incentives for parties to enter into efficient arrangements to cover contingencies.
Accuracy	The arrangements for handling a gas contingency are clearly prescribed.	No	Fails to meet the accuracy objective because the existing arrangements are ambiguous.
Fair	The arrangements for handling a gas contingency are fair to all stakeholders.	No	The status quo allows for contracted gas supplies to be diverted from electricity generators during times when gas has potentially high value and there is no recognition of the value for such gas, i.e. free-riding can occur.

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Reliable	The arrangements for handling a gas contingency provide for reliable outcomes.	No	The status quo provides uncertain outcomes during a gas contingency because the arrangements lack any effective compliance regime, do not recognise the value of gas in times of critical contingencies and, in turn, could create problems for future security of supply.
Barriers to competition minimised/ Facilitates Retail Competition	The arrangements for handling a gas contingency do not raise barriers to competition.	Yes	The status quo is neutral to competition outcomes.

Option 2 – Pan-industry agreement

The Statement of Proposal concluded that a pan-industry agreement would fail to meet the requirements for effective critical contingency management. Gas Industry Co does not consider that continuation of a pan-industry agreement is a reasonably practicable option as it fails to deliver the regulatory objective. However, analysis of a pan-industry agreement is presented below for completeness.

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Regulatory objective	Effective handling of a national or regional critical gas contingency without compromising long-term security of supply.	No	A consensus agreement binding all parties with a clearly-defined role and powers for a system operator during a contingency is not considered feasible.
Efficiency	The arrangements for handling a gas contingency provide efficient outcomes.	No	The infeasibility of this option means that the efficiency objective cannot be achieved.
Accuracy	The arrangements for handling a gas contingency are clearly prescribed.	No	The infeasibility of this option means that the accuracy objective cannot be achieved.

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Fair	The arrangements for handling a gas contingency are fair to all stakeholders.	No	A consensus agreement binding all parties with a clearly-defined role and powers for a system operator during a contingency, even if it were possible, has a risk of being unfair to some stakeholders.
Reliable	The arrangements for handling a gas contingency provide for reliable outcomes.	No	Given the infeasibility of this option the reliability objective cannot be achieved.
Barriers to competition minimised/ Facilitates Retail Competition	The arrangements for handling a gas contingency do not raise barriers to competition.	No	Because the outcome is considered infeasible, the existing free-riding would continue and this has implications for competition.

Option 3 – Regulatory arrangement

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Regulatory objective	Effective handling of a national or regional critical gas contingency without compromising long-term security of supply.	Yes	Regulations will establish clear obligations on all participants to comply with instructions from the CCO during a critical contingency. They will also provide incentives for participants to manage contingency exposures and this is expected to assist with long-term security of supply.
Accuracy	The arrangements for handling a gas contingency are clearly prescribed.	Yes	Regulations will establish clear powers, roles and obligations on all participants.

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Efficiency	The arrangements for handling a gas contingency provide efficient outcomes.	Yes	Regulations will establish clear powers, roles and obligations on all participants. Curtailment arrangements in regulations will preserve supply during a contingency for the most valuable uses and the contingency pricing arrangement should encourage efficient outcomes.
			The contingency pricing arrangements promote efficiency by ensuring participants take security of supply into account.
Fair	The arrangements for handling a gas contingency are fair to all stakeholders.	Yes	Regulations will bind all industry participants and consumers of gas (other than domestic consumers). Regulations will ensure entitlements to gas are protected, consumers with greater needs and/or vulnerability receive some protection, as well as ensuring security of gas supply is appropriately valued.
Reliable	The arrangements for handling a gas contingency provide for reliable outcomes.	Yes	Regulations will establish clear and enforceable obligations on all participants in the management of a critical contingency. Contingencies are more likely to be well-managed and provide for reliable outcomes.
Barriers to competition minimised/ Facilitates Retail Competition	The arrangements for handling a gas contingency do not raise barriers to competition.	Yes	Regulations ensure that entitlements to gas are protected and the value of gas is accounted for during a critical contingency. Some retailers could have exposures to high contingency prices while continuing to supply consumers on fixed prices. Retailers will have to seek out opportunities to enter into commercial arrangements with upstream suppliers and downstream customers to manage these exposures.

Appendix 2: List of stakeholders for consultation

Age Concern New Zealand Inc

Arete Limited

Auckland Gas Company Austral Pacific Energy Limited

Australian Gas Light Company, The Ballance Agri Nutrients (Kapuni) Ltd

Bay of Plenty Electricity

Bell Gully BRG

Bridge Petroleum Limited

Carter Holt Harvey

Castalia

Clifford Chance Law Office Commerce Commission Concept Consulting Consumers Institute Contact Energy Limited Craftware Computing Limited

Degussa Peroxide Ltd

E-Gas

Electricity & Gas Complaints Commission

Electricity Commission Energy Link Limited Energy Online Exergi Consulting Ltd

Fletcher Building Limited Fonterra Co-operative Group

Four Winds Communications Limited Gas Association of New Zealand Inc

GasNet

Genesis Energy Grey Power

Greymouth Gas New Zealand Limited

Greymouth Petroleum Heinz Watties Limited HP Consulting & Integration JH Vernon Consultancy Kensington Swan

LECG

Loyalty NZ Ltd

LPG Associations of New Zealand Major Electricity Users Group (MEUG)

Marsh Limited

Maui Development Limited

M-co

MED Energy Safety

Methanex New Zealand Limited Mighty River Power Limited

Ministry of Civil Defence and Emergency

Management

Ministry of Consumer Affairs Ministry of Economic Development

Ministry of Research, Science & Technology

Multigas (NZ) Limited

National Council of Women of New Zealand

Neil Walbran Consulting Limited New Zealand Oil and Gas Limited New Zealand Refining Co Ltd, The

New Zealand Steel Ltd NGC Metering Ltd

Norske Skog Tasman Limited

Nova Gas Limited

NZ Water & Wastes Association

NZX

Office of Hon David Parker O-I New Zealand Limited OMV New Zealand Limited

On Gas Industrial and Commercial

Origin Energy New Zealand Pan Pac Forest Products Ltd Parsons Brinckerhoff Associates

Pat Cunniffe PFPAN7

Powerco Limited

PricewaterhouseCoopers

Quentin Hay

RBZ Energy Limited Russell McVeagh SBT Group
Shell (Petroleum Mining) Company Limited
Simpson Grierson
Stigley & Co
Strata Energy Consulting
Swift Energy New Zealand Limited
Tatua Cooperative Dairy Company
Terrence Currie
Tetenburg & Associates Ltd

Thorndon Chambers
Todd Energy Limited
Transpower Ltd
Vector Limited
Wanganui Gas Limited
Wellington Community Law Centre
Wendell Slatter
Westech Energy New Zealand

Appendix 3: Notice for Gazette

Notice of Making of a Recommendation and Assessment for Gas Governance Regulations

This notice of a recommendation and assessment for gas governance regulations is issued by Gas Industry Company Limited ('Gas Industry Co') approved as the industry body by Order in Council under section 43ZL of the Gas Act 1992 ('the Act').

Section 43O of the Act provides that, no later than 10 working days after making a recommendation for a gas governance regulation to the Minister of Energy, Gas Industry Co must publicise the recommendation and the assessment completed under section 43N of the Act.

Recommendation

On 30 June 2008 Gas Industry Co made a recommendation to the Minister of Energy, under sections 43F(2)(a)(vi) and 43S of the Act, for approval of the Gas Governance (Critical Contingency Management) Regulations to provide for the establishment of a critical contingency management regime. The purpose of the regulations is to:

- identify the onset of a critical contingency;
- establish procedures for effective management of a critical contingency;
- provide for the appointment of a Critical Contingency Operator (CCO) whose primary role is to restore the supply/demand balance by targeted curtailment of load; and
- establish a price which is used to settle inadvertent trading between those parties whose suppliers have failed and those parties who have access to supplies but whose customers have been curtailed.

A recommendation for amended regulations providing for compliance with, and enforcement of, the Gas Governance (Critical Contingency Management) Regulations was made in conjunction with this recommendation.

A copy of Gas Industry Co's recommendation, including the assessment, is available at no cost on Gas Industry Co's website: http://www.gasindustry.co.nz

Dated at Wellington this 30th day of June 2008.

For and on behalf of Gas Industry Co

Rt. Hon. James Bolger ONZ,

Chair

Appendix 4: Notice for website

Under section 43O of the Gas Act 1992 Gas Industry Co must, no later than 10 working days after making a recommendation to the Minister of Energy on gas governance arrangements, publicise that recommendation and the assessment completed under section 43N of the Act.

On 30 June 2008, Gas Industry Co made a recommendation in respect of arrangements for the effective management of critical gas contingencies. The text of this recommendation, including the assessments under section 43N of the Act, are available through the website link below:

Recommendation to the Minister of Energy on Arrangements for the Effective Management of Critical Gas Contingencies

Appendix 5: Gas Governance (Critical Contingency Management) Regulations

DRAFT

Gas Governance (Critical Contingency Management) Regulations 2008

Governor-General

Order in Council

At Wellington this day of 2008

Present: in Council

Pursuant to sections 43F, 43G, and 43S of the Gas Act 1992, His Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, and on the recommendation of the Minister of Energy made in accordance with sections 43J to 43O of that Act, makes the following regulations.

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Regulations

1 Title

These regulations are the Gas Governance (Critical Contingency Management) Regulations 2008.

2 Commencement

- (1) Parts 3 and 4 come into force on the 5th business day after the day on which the industry body publishes a statement in the *Gazette* in accordance with regulation 32(1).
- (2) The rest of these regulations come into force on the 28th day after the date their notification in the *Gazette*.

3 Purpose

The purpose of these regulations is to achieve the effective management of critical gas outages and other security of supply contingencies without compromising long-term security of supply.

4 Outline

These regulations provide for—

- (a) the appointment of a critical contingency operator and funding arrangements in relation to the regulations; and
- (b) the development of critical contingency management plans; and
- (c) processes for managing a critical contingency; and
- (d) processes for determining gas imbalances resulting from a critical contingency and setting a price to apply to those gas imbalances.

Part 1 General provisions

5 Interpretation

In these regulations, unless the context otherwise requires,—

Act means the Gas Act 1992

affected parties means,—

- (a) in respect of the part of the transmission system governed by MPOC, interconnected parties affected by the critical contingency and with a contingency imbalance; and
 - (b) in respect of all other parts of the transmission system, interconnected parties and shippers affected by the critical contingency and with a contingency imbalance

business day means any day of the week except—

- (a) Saturday and Sunday; and
- (b) any day that Good Friday, Easter Monday, Anzac Day, the Sovereign's Birthday, Labour Day, Christmas Day, Boxing Day, New Year's Day, the day after New Year's Day, and Waitangi Day are observed for statutory holiday purposes; and
- (c) any other day that the industry body has determined not to be a business day as published by the industry body civil defence emergency means an emergency that results in a declaration of a state of national emergency or a declaration of a state of local emergency under the Civil Defence Emergency Management Act 2002 or any equivalent declaration under any subsequent replacement legislation

commencement date means the date referred to in regulation 2(2)

Commission means the Energy Commission established under section 43ZZH of the Act

communications plan means the plan published by the critical contingency operator under regulation 35

consumer-

(a) means any person who is supplied, or applies to be supplied, with gas (other than a domestic consumer); but

(b) does not include a transmission system owner or any gas distributor or retailer, except to the extent that the transmission system owner, the gas distributor, or retailer is supplied, or applies to be supplied, with gas for its own consumption and not for the purposes of resupply to any other person

consumer installation means 1 or more gas installations that have a single point of connection to a distribution system or a transmission system and for which there is, or previously has been, a single consumer

contingency imbalance means either a negative contingency imbalance or a positive contingency imbalance as defined in regulation 69(2)

critical contingency means a critical contingency as determined by the critical contingency operator in accordance with regulation 45

critical contingency management plan means a plan approved by the industry body under regulation 30 or 31 **critical contingency operator** means the person appointed in accordance with regulation 6(1)

critical contingency operator service provider agreement means the agreement between the industry body and a person in respect of that person's appointment as the critical contingency operator

critical contingency price means a price determined by the industry expert under regulation 67

curtailment arrangements means the curtailment arrangements set out in Schedule 2

curtailment band means a curtailment band as specified in the curtailment arrangements

director of civil defence emergency management means the director appointed under the Civil Defence Emergency Management Act 2002 or any person appointed to an equivalent or replacement role under any subsequent replacement legislation

electricity system operator means the service provider for the time being who is appointed as system operator pursuant to the Electricity Governance Regulations 2003, or any person appointed to an equivalent or replacement role under any subsequent replacement legislation

essential service provider means a consumer that has been approved as an essential service provider under regulation 42 **expert adviser** means a person appointed by the industry body in accordance with regulation 27 to be the expert adviser in respect of a proposed critical contingency management plan or amendment

gas gate means the point of connection between—

- (a) a transmission system and a distribution system; or
- (b) a transmission system and a consumer installation; or
- (c) 2 distribution systems

gas producer has the same meaning as in section 43D(1) of the Act, but in respect of Maui gas means the Crown

go-live date means the day referred to in regulation 2(1)

industry body means—

- (a) the industry body approved by Order in Council under section 43ZL of the Act; or
- (b) in the event that the approval of the industry body is revoked under section 43ZM of the Act and no other industry body is approved, the Commission

industry expert means a person appointed by the industry body in accordance with regulation 65

information guide means the guide published by the critical contingency operator under regulation 36

interconnected party means any person who has an interconnection agreement with a transmission system owner to take gas from, or inject gas into, an interconnection point on the transmission system

large consumer means any consumer installation connected directly to the transmission system that has the potential to consume gas at rates that in aggregate exceed 15 terajoules a day

Maui Pipeline Operating Code or MPOC means the code, issued by the owners of that part of the transmission system identified as the Maui pipeline on the map published in accordance with regulation 10, covering operation of the Maui pipeline, as amended from time to time

minimal load consumer means a person approved by a retailer to be a minimal load consumer in accordance with regulation 43

National Gas Outage Contingency Plan or NGOCP means the document entitled "Gas Contingency Plan: A Plan for the New Zealand Natural Gas Industry to Manage the Interruption of Gas Supplies", version 2.3, issued by the National Gas Outage Planning Group and dated 1 December 2005

OATIS means the online interactive open access transmission information system, or other replacement information system, that is used to facilitate information exchange in respect of the open access regime under MPOC and VTC

obligations, in relation to a person, includes the duties, rights, powers, functions, and responsibilities of the person

publish means,—

- (a) after the commencement date and before the go-live date, in respect of information to be published by the industry body, to make such information available on the industry body's Internet site; and
- (b) on and after the go-live date, in respect of information to be published by the industry body or the critical contingency operator, to make such information available on the critical contingency Internet site established in accordance with regulation 9; and
- (c) for all other information, to make available to the intended recipient in such manner as may be determined by the industry body from time to time

retailer—

- (a) means any person who supplies gas to another person or other persons through the transmission system, or through a distribution system where that gas has been transported through the transmission system, for any purpose other than for resupply by the other person or persons; but
- (b) does not include a gas producer in respect of the supply of gas to a large consumer

shipper means a person who is a party to an agreement with a transmission system owner to have gas transported through all or part of the transmission system

switch means a switch as defined in the Gas (Switching Arrangements) Rules 2008

system operator means a person who controls the physical operation of a transmission system

transmission system means the system—

- (a) comprising those high pressure transmission pipelines from the point where the gas leaves a gas processing facility to an interconnection point for distribution or, where the gas does not enter a distribution system, to a consumer; and
- (b) as depicted in the map published by the industry body in accordance with regulation 10

transmission system code means any code that sets out detailed rules covering access, use, and operation of part or all of a transmission system, as amended from time to time

transmission system owner means any person or persons who own a transmission system or part of a transmission system and includes any agent of the transmission system owner

Vector Transmission Code or **VTC** means the code, issued by the owners of that part of the transmission system identified as the Vector pipeline on the map published in accordance with regulation 10, covering operation of the Vector pipeline, as amended from time to time.

Appointment

6 Appointment of critical contingency operator

- (1) The industry body may, by agreement with a person who is the system operator for all or any part of the transmission system, appoint that person to act as the critical contingency operator.
- (2) The critical contingency operator has the obligations set out in these regulations.
- (3) The industry body may at any time terminate, or change the appointment of, or reappoint, any person as the critical contingency operator, subject to the terms of the critical contingency operator service provider agreement.
- (4) The remuneration of the critical contingency operator is as agreed between the industry body and the critical contingency

- operator in the critical contingency operator service provider agreement.
- (5) The industry body and the critical contingency operator may agree on any other terms and conditions not inconsistent with the obligations of the critical contingency operator under these regulations.
- (6) If a person is the system operator of all of the transmission system, the industry body must appoint that person as the critical contingency operator for an initial term of 5 years beginning on the commencement date, on the terms of the critical contingency operator service provider agreement.
- (7) Any appointment of the critical contingency operator beyond the initial term is at the industry body's sole discretion.
- (8) If at any time the person appointed to act as critical contingency operator ceases to be the system operator for any part or all of the transmission system, the industry body may terminate the critical contingency operator service provider agreement in accordance with the terms of that agreement.

7 Other terms of critical contingency operator service provider agreement

In addition to any other terms and conditions required by these regulations, the critical contingency operator service provider agreement must provide for—

- (a) appropriate provision for liability cover; and
- (b) testing of plans and procedures; and
- (c) publishing a communications plan and information guide.

8 Publication of critical contingency operator service provider agreement

The industry body must publish the critical contingency operator service provider agreement.

9 Critical contingency Internet site

(1) Before the go-live date, the critical contingency operator in consultation with the industry body must develop a critical contingency Internet site for the purpose of providing a cen-

- tral repository for publicly available information relevant to a critical contingency.
- (2) The critical contingency Internet site must be able to perform the functions required of the Internet site by these regulations, and be accessible by the public on and after the go-live date.
- (3) The critical contingency operator must take reasonable steps to ensure the information on the critical contingency Internet site is accurate and up to date.
- (4) The critical contingency operator must publish on the critical contingency Internet site all information provided to it by the industry body for the purposes of publication by the industry body.
- (5) For the purposes of these regulations, the information referred to in subclause (4) is deemed to be published by the industry body.

10 Publication of transmission system

- (1) No later than 5 business days after the commencement date, each transmission system owner must provide the industry body with the information specified in clause 1(2) of Part 5 of Schedule 1 of the Gas (Information Disclosure) Regulations 1997.
- (2) As soon as practicable after receiving the information described in subclause (1), the industry body must consult with all transmission system owners.
- (3) As soon as practicable after that consultation, the industry body must publish a map depicting the transmission system.
- (4) On the go-live date, or as soon as practicable after the go-live date, the industry body must publish a map depicting the transmission system.
- (5) A transmission system owner must give notice to the industry body of any error or change in the boundaries of, and pipelines comprising, the transmission system as soon as practicable after becoming aware of the error or change.
- (6) The industry body may amend or update the boundaries of, and pipelines comprising, the transmission system in response to any notice given by a transmission system owner under sub-

clause (5) and, where applicable, must publish an updated map depicting the transmission system.

11 Performance standards

- On the appointment of the critical contingency operator, the industry body must set performance standards against which the critical contingency operator's performance is to be reported and measured.
- (2) Before setting any performance standards under subclause (1), the industry body must consult with the critical contingency operator.
- (3) Following the completion of any review carried out by the industry body under regulation 12, the industry body may revoke, amend, or add to any performance standards set under this regulation.

12 Review of critical contingency operator performance by the industry body

- (1) The industry body must, on an annual basis, review the manner in which the critical contingency operator has performed its obligations under these regulations in the preceding 12 months.
- (2) The review must concentrate on the critical contingency operator's
 - (a) compliance with its obligations under these regulations; and
 - (b) compliance with any performance standards agreed between the critical contingency operator and the industry body; and
 - (c) compliance with the provisions of the critical contingency operator service provider agreement.

Scope

13 Relationship with NGOCP and transmission system codes

- (1) With effect from the go-live date,—
 - (a) these regulations, and the critical contingency management plans approved under these regulations, replace the National Gas Outage Contingency Plan; and

- (b) the National Gas Outage Contingency Plan ceases to have effect except in so far as it relates to events and obligations and liabilities occurring or arising before the golive date.
- (2) MPOC, VTC, and any other transmission system code must be read subject to these regulations.
- (3) If both a transmission system code and these regulations impose an obligation or liability in respect of the same matter, the obligation or liability in the regulations prevails to the extent that the obligation or liability in the code is inconsistent with these regulations.

14 Civil Defence Emergency Management Act 2002

A person is not required to comply with these regulations where that compliance prevents that person from complying with the requirements of the Civil Defence Emergency Management Act 2002.

Funding

15 Development fee

- (1) The development fee is a fee to meet the critical contingency development costs.
- (2) The critical contingency development costs are—
 - (a) the costs of the industry body associated with—
 - (i) the appointment of the critical contingency operator; and
 - (ii) the review and recommendation for approval of proposed critical contingency management plans under regulations 26 to 30; and
 - (b) the costs (if any) payable by the industry body to the critical contingency operator before the go-live date in respect of the development and establishment of any critical contingency management arrangements required under these regulations; and
 - (c) the costs of the industry body in connection with the development and establishment of the critical contingency management arrangements.

- (3) Every person who purchases gas directly from a gas producer during the 28 days after the commencement date is liable to pay a development fee in accordance with these regulations.
- (4) To avoid doubt, the critical contingency development costs do not include costs incurred before the commencement date.

16 How and when development fee must be paid

- (1) The development fee is payable to the industry body.
- (2) Every person to whom regulation 15(3) applies must supply to the industry body a return as at a date that is as soon as practicable after the commencement date and no later than 38 days after the commencement date (**the deadline for supplying returns**). The return must state—
 - (a) the total number of gigajoules of gas that the person purchased directly from all gas producers during the 12 months before the date of the return; and
 - (b) how many gigajoules of gas were purchased from each gas producer during that 12-month period.
- (3) As soon as practicable after the deadline for supplying returns, the industry body must determine and publish a breakdown of the estimated critical contingency development costs.
- (4) As soon as practicable after the deadline for supplying returns, the industry body must invoice every person to whom regulation 15(3) applies for that person's share of those costs calculated in accordance with the following formula:

$$a \times \frac{b}{c}$$

where—

- a is the estimated critical contingency development costs
- b is the total quantity of gas purchased by that person directly from all gas producers during the 12 months before the commencement date
- c the total quantity of gas purchased by all persons directly from all gas producers during the 12 months before the commencement date.

- (5) As soon as practicable after the go-live date, the industry body must determine and publish on its Internet site the actual critical contingency development costs.
- (6) No less than 10 business days after publication of the actual critical contingency development costs, the industry body must invoice or issue a credit note to every person to whom regulation 15(3) applies with the difference between—
 - (a) that person's share of the actual critical contingency development costs calculated in accordance with the formula in subclause (4), with the necessary modifications; and
 - (b) the amount of the estimated critical contingency developments costs invoiced to that person.

17 Ongoing fees

- (1) The ongoing fees are monthly fees to meet the critical contingency ongoing costs.
- (2) The critical contingency ongoing costs are—
 - (a) the costs payable by the industry body to the critical contingency operator in respect of that year; and
 - (b) the costs payable to any person appointed by the industry body to carry out any obligations under these regulations in respect of that year; and
 - (c) the costs of the industry body associated with critical contingency management and its obligations under these regulations during that year.
- (3) Every person who purchases gas directly from a gas producer during a month is liable to pay ongoing fees for that month in accordance with these regulations.

18 How and when estimated ongoing fees payable

- (1) The estimated ongoing fees are payable to the industry body.
- (2) Every person who is liable to pay ongoing fees for a month must supply to the industry body a return no later than the tenth day of that month, unless otherwise agreed by the industry body. The return must state—

- (a) the total number of gigajoules of gas that the person purchased directly from all gas producers during the previous month; and
- (b) how many gigajoules of gas were purchased from each gas producer during that month.
- (3) As soon as practicable after the go-live date, the industry body must determine and publish the estimated critical contingency ongoing costs for the first year or part year of operation of the critical contingency management plans.
- (4) As soon as practicable after the publication of the estimated critical contingency ongoing costs, the industry body must notify every person to whom regulation 17(3) applies of the estimated critical contingency ongoing costs, and that ongoing fees will be payable by that person in that year or part year in accordance with the following formula:

$$a \times \frac{b}{c}$$

where-

- a the critical contingency ongoing costs estimated in accordance with subclause (4) and divided by the number of months in the applicable year or part year
- b the total quantity of gas purchased by that person directly from all gas producers during the month before the current month
- c the total quantity of gas purchased by all persons directly from all gas producers during the month before the current month.
- (5) For each year following the first year or part year of operation, the industry body must—
 - (a) estimate and publish on its Internet site at least 2 months before the beginning of the year a breakdown of the estimated critical contingency ongoing costs for that year; and
 - (b) as soon as practicable after publication of the estimated critical contingency costs, notify each person to whom

regulation 17(3) applies of the estimated critical contingency ongoing costs, and that ongoing fees will be payable by that person in that year in accordance with the formula in accordance with subclause (4).

(6) On the first business day of each month, the industry body or the critical contingency operator must invoice every person to whom regulation 17(3) applies with that person's share of the estimated critical contingency ongoing costs, calculated in accordance with the formula in subclause (4).

19 How and when actual ongoing fees payable

- (1) The actual ongoing fees are payable to the industry body.
- (2) As soon as practicable after the end of each year, the industry body must determine and publish on its Internet site, and on the critical contingency Internet site, a breakdown of the actual critical contingency ongoing costs for that year.
- (3) No less than 10 business days after publication of the actual critical contingency ongoing costs, the industry body must invoice or issue a credit note to each person to whom regulation 17(3) applies with the difference between—
 - (a) that person's share of the actual critical contingency ongoing costs calculated in accordance with the formula in regulation 18(4), with the necessary modifications; and
 - (b) the amount of the estimated critical contingency ongoing costs invoiced to that person during the applicable year.

20 General provisions regarding fees

- (1) The due date for the payment of any invoice or refund of any credit is—
 - (a) the 20th day of the month in which the invoice or credit note was received; or
 - (b) if the day referred to in paragraph (a) is not a business day, the following business day.
- (2) The fees payable under regulations 15 to 19 are exclusive of any goods and services tax payable under the Goods and Services Tax Act 1985, and goods and service tax on those fees

- (if any) may be added to any invoices issued to persons by the industry body under regulation 16 or 18.
- (3) The industry body must ensure that all information and returns that are supplied under regulations 15 to 19 are used only for the purposes of collecting the development fee and the ongoing fees.
- (4) The returns supplied to the industry body under regulation 7 of the Gas (Levy of Industry Participants) Regulations 2008 (or, where applicable, any replacement levy regulations) are sufficient to fulfil the requirements of regulations 16(2) and 18 (2) if the person who supplied the returns consents to the returns being used for this purpose.

Notices and receipt of information

21 Giving of ordinary notices

- (1) If these regulations require any notice to be given, the notice must be in writing and be—
 - (a) delivered by hand to the nominated office of the addressee; or
 - (b) sent by post to the nominated postal address of the addressee; or
 - (c) sent by fax to the nominated fax number of the addressee; or
 - (d) sent by electronic transmission or any other similar method of electronic communication to the appropriate nominated electronic address of the addressee.
- (2) This regulation does not apply to the giving of urgent notices, but does apply to the confirmation of urgent notices under regulation 23(3).

When ordinary notices taken to be given

- (1) In the absence of proof to the contrary, notices are taken to be given.—
 - (a) in the case of notices delivered by hand to a person, when actually received at that person's address:
 - (b) in the case of notices sent by post, at the time when the letter would in the ordinary course of post be delivered;

- and in proving the delivery, it is sufficient to prove that the letter was properly addressed and posted:
- (c) in the case of notices sent by fax, at the time indicated on a record of its transmission:
- (d) in the case of notices sent by electronic transmission or any other similar method of electronic communication,—
 - (i) at the time the computer system used to transmit the notice has received an acknowledgment or receipt to the electronic address of the person transmitting the notice; or
 - (ii) the person who gave the notice proves the notice was transmitted by computer system to the electronic address provided by the addressee.
- (2) This regulation does not apply to the giving of urgent notices, but does apply to the confirmation of urgent notices under regulation 23(3).

23 Urgent notices

- (1) In relation to a critical contingency, these regulations provide for urgent notices to be given in certain circumstances.
- (2) Despite regulations 21 and 22, an urgent notice may be given orally where the person issuing a notice considers that the urgency of the situation means the notice should not be given in writing.
- (3) If an urgent notice is given orally under subclause (2), the person who gave that notice must, as soon as practicable, confirm that urgent notice in writing in accordance with regulations 21 and 22.

Part 2 Obligations before critical contingency

Critical contingency management plans

24 Critical contingency management plan

No later than 50 business days after the commencement date, each transmission system owner must prepare a proposed critical contingency management plan for its part of the transmission system and submit it to the industry body for approval.

25 Content of critical contingency management plan

- (1) A proposed critical contingency management plan must be consistent with these regulations and must provide for the following:
 - (a) a threshold for each part of the transmission system referred to in Schedule 1 that meets the following requirements:
 - (i) the threshold must be not be less than, and must not exceed, the relevant permissible limits for those thresholds set out in Schedule 1; and
 - (ii) the threshold must be specified in terms of the projected number of hours remaining before the minimum operating pressure is reached; and
 - (iii) the threshold must specify, as part of the threshold, the minimum operating pressure; and
 - (iv) the minimum operating pressure means the minimum pressure that is required to maintain the supply of gas across the relevant part or parts of the transmission system and to avoid disruption of distribution systems connected to the transmission system; and
 - (v) the minimum operating pressure must be measured at the points on the transmission system specified in Schedule 1; and
 - (b) a description of the events that the transmission system owner considers may feasibly result in a breach of the thresholds referred to in paragraph (a); and
 - (c) actions that the transmission system owner considers it may feasibly take to remedy any breach in those thresholds resulting from the events described in accordance with paragraph (b); and
 - (d) a process, consistent with the curtailment arrangements set out in Schedule 2, outlining the manner in which curtailment will be implemented, curtailment bands, how restoration will be implemented, and an explanation as to how these processes meet the objectives set out in Schedule 2; and
 - (e) a communications plan, describing the communications that the transmission system owner must initiate by no-

tice to the critical contingency operator, other transmission system owners, operators of gas distribution systems, shippers, retailers, large consumers, and any other person it considers necessary before and during a critical contingency, the reciprocal communications, and time frames within which those communications are to take place; and

- (f) the contact details of any suitably qualified persons employed by the transmission system owner who the transmission system owner proposes will be responsible for—
 - (i) giving communications to the critical contingency operator and receiving communications from the critical contingency operator under the communications plan; and
 - (ii) giving directions in accordance with the critical contingency management plan; and
- (g) the circumstances, if any, in which the transmission system owner considers it may be desirable for the critical contingency operator to direct the restoration of gas supply in an order different to that (last curtailed and first restored) set out in the curtailment arrangements in Schedule 2, including how, in those circumstances, that different order would better achieve—
 - (i) the purpose of these regulations; and
 - (ii) the objectives of the curtailment arrangements set out in Schedule 2; and
- (h) a process, consistent with regulations 68 to 75, outlining the manner in which the contingency imbalances will be determined for each affected party over the period of the critical contingency, including—
 - (i) what information is to be used by the transmission system owner to determine contingency imbalances; and
 - (ii) how the transmission system owner is to allocate contingency imbalances to affected parties; and
 - (iii) processes outlining how the information concerning those allocated contingency imbalances is to be provided to the industry body for the

invoicing of those allocated contingency imbalances; and

- (i) a list of the contact details for the—
 - (i) operators of gas storage facilities that are connected to the relevant part of the transmission system; and
 - (ii) operators of upstream gas production facilities that are connected to the relevant part of the transmission system; and
 - (iii) large consumers connected directly to the relevant part of the transmission system; and
 - (iv) interconnected parties, retailers, and shippers who are trading across or utilising the relevant part of the transmission system; and
 - (v) operators of gas distribution systems connected to the relevant part of the transmission system;and
- (j) a description of how the transmission information referred to in regulation 37A will be made available to the critical contingency operator; and
- (k) any other things that the transmission system owner considers appropriate to give effect to the purpose of these regulations.
- (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.

26 Process for preparing critical contingency management plan

Before submitting the proposed critical contingency management plan to the industry body for approval, a transmission system owner must—

(a) consult on a draft of the proposed critical contingency management plan with persons that the transmission system owner considers are representative of the interests of persons likely to be substantially affected by the proposed critical contingency management plan; and

- (b) immediately before consulting under paragraph (a), provide a draft of the proposed critical contingency management plan to—
 - (i) the critical contingency operator; and
 - (ii) the industry body, who must also publish the draft of the proposed plan; and
- (c) give persons consulted with under paragraph (a) at least 20 business days to make submissions to the transmission system owner on the draft of the proposed critical contingency management plan; and
- (d) provide copies of the submissions to the industry body as soon as practicable after those submissions have been received; and
- (e) consider the submissions made and make any amendments to the proposed critical contingency management plan that the transmission system owner considers necessary.

27 Appoint expert adviser

The industry body must appoint an expert adviser to review a proposed critical contingency management plan or a proposed amendment to a critical contingency management plan within whichever of the following is applicable:

- (a) 30 business days of the commencement date; or
- (b) 5 business days of receiving a proposed amendment to a critical contingency management plan from a transmission system owner under regulations 33(4)(c), 34(6)(c), or 61(3)(c).

28 Expert adviser to consult critical contingency operator

- (1) As soon as practicable following receipt of a proposed critical contingency management plan under regulation 24 or a proposed amendment under regulations 33(4)(c), 34(6)(c), or 61 (3)(c), the industry body must provide the proposed plan or proposed amendment to the expert adviser and the critical contingency operator.
- (2) In reviewing the proposed critical contingency management plan or proposed amendment under regulation 29, the expert adviser must consult with the critical contingency operator.

- (3) The critical contingency operator may provide the expert adviser with a report on the proposed critical contingency management plan or proposed amendment in relation to any issues it perceives as material to the review by the expert adviser under regulation 29.
- (4) Any report prepared by the critical contingency operator under subclause (3) must be submitted to the expert adviser no later than 10 business days after the proposed critical contingency management plan or proposed amendment was received from the industry body.

29 Review of a critical contingency management plan

- (1) The expert adviser must review—
 - (a) a proposed critical contingency management plan provided by a transmission system owner under regulations 24 or 30(3); or
 - (b) a proposed amendment to a critical contingency management plan under regulations 33(4)(c), 34(6)(c), or 61(3)(c),—
 - to determine whether or not to recommend approval of the proposed critical contingency management plan or proposed amendment to the industry body.
- (2) In reviewing the proposed critical contingency management plan or proposed amendment, the expert adviser—
 - (a) must have regard to any report submitted in accordance with regulation 28(3) and (4); and
 - (b) may have regard to any submissions received by the transmission system owner under regulation 26.
- (3) Following the review, and no later than 20 business days after receiving the proposed critical contingency management plan or proposed amendment, the expert adviser must—
 - (a) make a recommendation, with reasons, to the industry body on whether the industry body should approve the proposed critical contingency management plan or proposed amendment; and
 - (b) give notice to the relevant transmission system owner and the critical contingency operator of its recommendation and the reasons for its recommendation.

- (4) If the expert adviser considers that the proposed critical contingency management plan or proposed amendment complies with regulation 25 and gives effect to the purpose of these regulations, the expert adviser must make a recommendation that the industry body should approve the proposed critical contingency management plan or proposed amendment.
- (5) If the expert adviser gives notice under subclause (3)(b) that it has recommended that the proposed critical contingency management plan or proposed amendment should not be approved by the industry body, then, no later than 10 business days after receiving that notice, the relevant transmission system owner—
 - (a) must revise the proposed critical contingency management plan in response to the reasons given in that notice, and resubmit the proposed plan to the industry body for approval; or
 - (b) may revise the proposed amendment in response to the reasons given in that notice, and resubmit the proposed plan to the industry body for approval.
- (6) Regulations 27, 28, 29, and 30 apply to a proposed plan or proposed amendment resubmitted for approval under subclause (5).
- (7) The industry body must publish a proposed plan or proposed amendment resubmitted for approval under subclause (5).

30 Approval of critical contingency management plan

- (1) No later than 5 business days after receiving a recommendation to approve under regulation 29(3), the industry body must—
 - (a) approve or decline to approve the proposed critical contingency management plan or proposed amendment; and
 - (b) give notice to the relevant transmission system owner and the critical contingency operator of its determination and the reasons for its determination.
- (2) The industry body must approve the proposed critical contingency management plan or proposed amendment if—
 - (a) it receives a recommendation for approval from the expert adviser under regulation 29(3); and

- (b) the industry body considers that the proposed critical contingency management plan or proposed amendment complies with regulation 25 and gives effect to the purpose of the regulations.
- (3) If the industry body gives notice under subclause (1)(b) that it has declined to approve the proposed critical contingency management plan or proposed amendment, the relevant transmission system owner, no later than 10 business days after receiving that notice,—
 - (a) must revise the proposed critical contingency management plan in response to the reasons given in that notice, and resubmit the proposed plan to the industry body for approval; or
 - (b) may revise the proposed amendment in response to the reasons given in that notice, and resubmit the proposed amendment to the industry body for approval.
- (4) Regulations 27, 28, 29, and 30 apply to a proposed plan or proposed amendment resubmitted for approval under subclause (3)
- (5) The industry body must publish a proposed plan or proposed amendment resubmitted for approval under subclause (3).

31 Amendment of plan by industry body if deadlock exists

- (1) This regulation only applies if a proposed critical contingency management plan submitted under regulations 24, 29(5)(a), or 30(3) (a) has not been approved by the industry body under regulation 30 within 6 months of the commencement date.
- (2) To avoid doubt, this regulation does not apply to any proposed amendment to a critical contingency management plan.
- (3) The industry body may itself amend the proposed critical contingency plan, if the industry body considers that the amendments are—
 - (a) related to the reasons set out in any notice referred to in regulation 29(3)(b) or 30(1)(b); and
 - (b) necessary to ensure the proposed critical contingency management plan complies with regulation 25 and gives effect to the purpose of these regulations.

- (4) If the industry body amends the proposed critical contingency management plan under subclause (3), the industry body must give notice to the relevant transmission system owner and the critical contingency operator of the amendments and the reasons for the amendments.
- (5) On the fifth business day after giving notice under subclause (4), the industry body must determine whether or not to approve the proposed critical contingency management plan as amended under subclause (3).

32 Publish critical contingency management plans

- (1) As soon as practicable after the industry body has approved critical contingency management plans to cover all of the transmission system, the industry body must publish, both in the *Gazette* and on the industry body's Internet site, a statement specifying—
 - (a) that it has approved critical contingency plans to cover all of the transmission system; and
 - (b) the go-live date on which, pursuant to regulation 2, Parts 3 and 4 come into force.
- (2) No later than 5 business days after the industry body publishes a statement under subclause (1), the critical contingency operator must publish the critical contingency management plans on the critical contingency Internet site.
- (3) If a transmission system operator has given notice that certain information in a proposed critical contingency management plan or a proposed amendment is confidential or commercially sensitive, the industry body must determine whether that information is to be published by the critical contingency operator.
- (4) The industry body must advise the critical contingency operator of its determination under subclause (3) when giving notice of its approval of the plan or amendment under regulation 30(1), and the critical contingency operator must comply with that determination.

33 Maintaining critical contingency management plan

- (1) Each transmission system owner must ensure that the contact details included in its critical contingency management plan in accordance with regulation 25 are current.
- (2) Each transmission system owner must review its critical contingency management plan to determine whether it complies with regulation 25, and whether it is able to give effect to the purpose of these regulations,—
 - (a) at any time it is directed to do so by the critical contingency operator; and
 - (b) at any time that the relevant transmission system owner is of the opinion that its critical contingency management plan may not—
 - (i) adequately comply with regulation 25; or
 - (ii) give effect to the purpose of these regulations; and
 - (c) in any event, at least once every 2 years.
- (3) Each transmission system owner must notify the critical contingency operator, within 10 business days of making a determination, that its critical contingency management plan may not adequately comply with regulation 25, or give effect to the purpose of these regulations.
- (4) If notice is given under subclause (3), the relevant transmission system owner must—
 - (a) prepare a proposed amendment to the critical contingency management plan that it considers would comply with regulation 25 and better achieve the purpose of these regulations; and
 - (b) consult on the proposed amendment in accordance with regulation 26, except if the transmission system owner and the critical contingency operator agree that the proposed amendment is immaterial; and
 - (c) submit, after consultation in accordance with paragraph (b), the proposed amendment to the industry body for approval in accordance with regulations 27 to 30.

34 Testing critical contingency management plans

(1) The critical contingency operator must, after consultation with transmission system owners, instigate exercises to test that—

- (a) the critical contingency management plans comply with regulation 25 and give effect to the purpose of these regulations; and
- (b) the contact details included in critical contingency management plans in accordance with regulation 25 are current; and
- (c) the list of emergency contact details maintained by retailers in accordance with regulation 41 is current.
- (2) Transmission system owners, and any interconnected parties, shippers, retailers, and large consumers reasonably requested by the critical contingency operator, must participate in tests instigated under subclause (1).
- (3) To avoid doubt, participation in a civil defence emergency management training exercise that tests the matters set out in subclause (1) is considered to be an exercise for the purposes of this regulation.
- (4) An exercise must be instigated by the critical contingency operator at least once every 12 months, except if there has been a critical contingency within that 12-month period and the report produced in accordance with regulation 61 confirms that the critical contingency management plans meet the test criteria in subclause (1).
- (5) Within 10 business days of completing an exercise under subclause (1), each transmission system owner must provide a report to the critical contingency operator that—
 - (a) explains why its critical contingency management plan meets or does not meet the test criteria in subclause (1); and
 - (b) identifies areas in which its critical contingency management plan can be improved; and
 - (c) recommends to the critical contingency operator any amendments that the transmission system owner considers should be made to its critical contingency management plan; and
 - (d) contains any other information that the transmission system owner considers is appropriate.
- (6) Following the provision of the report provided under subclause (5), a transmission system owner may—

- (a) prepare a proposed amendment to the critical contingency management plan that it considers would better achieve the purpose of these regulations; and
- (b) consult on the proposed amendment in accordance with regulation 26, except if the transmission system owner and the critical contingency operator agree that the proposed amendment is immaterial; and
- (c) submit, after consultation in accordance paragraph (b) (if any), the proposed amendment to the industry body for approval in accordance with regulations 27 to 30.

Communications plan and information guide

35 Publish communications plan

- (1) The critical contingency operator must, in consultation with transmission system owners, prepare a communications plan and publish it on the go-live date.
- (2) The communications plan will govern the communications between the critical contingency operator and the transmission system owners during a critical contingency.
- (3) The communications plan must apply to communications from the critical contingency operator to the transmission system owners, and from the transmission system owners to the critical contingency operator, relating to—
 - (a) implementing curtailment of demand; and
 - (b) revising curtailment of demand; and
 - (c) restoring gas supply; and
 - (d) terminating a critical contingency; and
 - (e) identifying persons who did not comply with curtailment or restoration directions.
- (4) The critical contingency operator may, after consultation with transmission system owners, amend and publish a revised communications plan.

36 Information guide for certain parties

On the go-live date, the critical contingency operator must publish an information guide that explains the communication flows between the critical contingency operator and the following parties during a critical contingency:

- (a) the electricity system operator; and
- (b) the director of civil defence emergency management; and
- (c) operators of gas storage facilities; and
- (d) operators of upstream gas production facilities; and
- (e) the industry body; and
- (f) the Minister of Energy and the Secretary; and
- (g) any other person that the critical contingency operator considers necessary.

37 Process for preparing information guide

- (1) Before publishing the information guide, the critical contingency operator must—
 - (a) consult with persons that the critical contingency operator considers are representative of the interests of persons likely to be substantially affected by the information guide; and
 - (b) give persons consulted with under paragraph (a) at least 20 business days to make submissions to the critical contingency operator on the information guide; and
 - (c) consider the submissions made on the information guide.
- (2) The consultation process, including consideration of submissions, must be completed within 60 business days of the commencement date.
- (3) If submissions made on the information guide are also relevant to the critical contingency management plans or communications plan, the critical contingency operator may consider those submissions in the preparation of any report on a critical contingency management plan under regulation 28(3) or in the preparation of the communications plan as applicable.
- (4) The critical contingency operator may, after consulting on any proposed amendments in accordance with subclause (1)(a), amend and publish a revised information guide.

Transmission system information

37A Transmission system owners to provide transmission system information

- (1) Each transmission system owner must ensure that the following information in relation to its parts of the transmission system is made available to the critical contingency operator, whether via OATIS or otherwise:
 - (a) metering (or other equipment) data on the amount of gas received into or taken from, and the pressure at or near, an interconnection point; and
 - (b) in respect of each day, the net quantity of gas agreed between the transmission system owner and an interconnected party, or otherwise expected or requested, to pass through each interconnection point; and
 - (c) data concerning the composition and quality of gas in its parts of the transmission system; and
 - (d) technical pipeline information referred to in clause 1 of Part 5 of Schedule 1 of the Gas (Information Disclosure) Regulations 1997; and
 - (e) any notices issued pursuant to a transmission system code by a transmission system owner in respect of its part of the transmission system; and
 - (f) any of the following data that the transmission system owner has access to and is reasonably requested (for the purpose of performing its obligations under these regulations) by the critical contingency operator:
 - (i) mismatch or operational imbalance data; and
 - (ii) historical flow information, linepack, or pressure data.
- (2) The information described in this regulation—
 - (a) must be the best information available (including real time information if applicable) that, in the particular circumstances, is in the transmission system owner's possession or can be obtained, or derived, without unreasonable difficulty or expense; and
 - (b) must be used by the critical contingency operator only for the purpose of performing its obligations under these regulations.

Consumer information

38 Retailers to provide consumer information

- (1) Each retailer must provide a notice to the critical contingency operator, no later than 40 business days after the commencement date, setting out—
 - (a) the number of the retailer's consumers who are supplied gas through each gas gate and who are in each of the curtailment bands set out in the curtailment arrangements, and their aggregate total annual consumption; and
 - (b) the number of the retailer's consumers who are designated as minimal load consumers who are supplied gas through each gas gate and who are in each of the curtailment bands set out in the curtailment arrangements, and their aggregate total annual consumption; and
 - (c) the number of the retailer's domestic consumers who are supplied gas through each gas gate and their aggregate total annual consumption.
- (2) Retailers must give notice to the critical contingency operator as soon as practicable whenever there is a change of 20% or greater in the aggregate total annual consumption figures provided in accordance with subclause (1) or a change in the number of minimal load consumers provided in accordance with subclause (1).
- (3) If the retailer does not possess, or cannot reasonably obtain, a consumer's actual total annual consumption, the retailer may provide its best estimate of that consumer's total annual consumption as part of the aggregate total annual consumption required by subclause (1).
- (4) To avoid doubt, for the purposes of this regulation, a **gas gate** does not include a point of connection between a distribution system and a gas measurement system.

38A Large consumers to provide information

(1) Each large consumer must provide a notice to the critical contingency operator, no later than 40 business days after the commencement date, setting out its total annual consumption, curtailment band, and minimal load designation (if any) to the critical contingency operator.

(2) A large consumer must give notice to the critical contingency operator as soon as practicable whenever there is a change of 20% or greater in its total annual consumption figures, its curtailment band, or its minimal load consumer designation.

39 Critical contingency operator to hold record of information

- (1) The critical contingency operator must keep a record of information provided to it by retailers and large consumers in accordance with regulations 38 and 38A, and such information must only be used by the critical contingency operator for the purposes of performing its obligations under these regulations.
- (2) If the critical contingency operator considers that information provided by any retailer or large consumer is materially incorrect, the critical contingency operator must, as soon as is reasonably practicable, give notice to the industry body that a specific retailer's or large consumer's information may be materially incorrect and provide all of the information provided by the retailer or large consumer in accordance with regulation 38 or 38A to the industry body.

40 Audit of retailer's consumption information

- (1) If the industry body is notified by the critical contingency operator under regulation 39 that a retailer's information may be materially incorrect, the industry body must give the relevant retailer 10 business days to correct its information and provide the updated information to the critical contingency operator.
- (2) If the critical contingency operator considers that the updated information provided under subclause (1) is materially incorrect, or the retailer does not provide the updated information, the critical contingency operator must, as soon as is reasonably practicable, give notice to the industry body.
- (3) Within 5 business days of receiving notification under subclause (2), the industry body must give notice to the retailer that the industry body intends to conduct an audit of that retailer.

- (4) The purpose of an audit under this regulation is to determine whether information provided to the critical contingency operator by the retailer is materially incorrect.
- (5) The audit must be conducted in accordance with regulation 76.

41 Emergency contact details

- (1) Retailers must maintain a list of the emergency contact details of all of their consumers who have annual gas consumption greater than 2 terajoules in any 12-month period.
- (2) Retailers must include or remove (as appropriate) the emergency contact details of a consumer on the list maintained in accordance with subclause (1) within 40 business days of that consumer concluding a switch of retailers.

42 Designation of consumers as essential service providers

- (1) The purpose of this regulation is to identify consumers who are essential service providers.
- (2) Each retailer must, as soon as reasonably practicable after the commencement date, notify its consumers that, if they wish to be classified as essential service providers, they must apply to the retailer in writing and that the application can be made at any time.
- (3) A retailer must approve a consumer's application to be an essential service provider if both of the following criteria are met:
 - (a) the consumer provides services that are necessary to further the emergency response objectives set out in clause 59
 (4) of the National Civil Defence Emergency Management Plan Order 2005; and
 - (b) the consumer can demonstrate that its annual gas consumption—
 - (i) was greater than 2 terajoules in any 12-month period within the 2 years before the consumer's application; or
 - (ii) will be greater than 2 terajoules in the 12-month period after the consumer's application.
- (4) Each retailer must, within 10 business days of receiving a consumer's application to be an essential service provider, deter-

mine whether to approve or decline that consumer's application and give notice of its determination to—

- (a) the consumer; and
- (b) if applicable, the gas distributor whose distribution system is used to distribute gas to that consumer.
- (5) If a retailer reasonably considers a consumer who has been approved as an essential service provider no longer meets the criteria set out in subclause (3), the retailer must give notice requiring the consumer to reapply under this regulation for approval as an essential service provider.
- (6) To avoid doubt, a consumer remains an essential service provider unless it receives notice under subclause (5) that the retailer has declined its reapplication.

43 Designation of consumers as minimal load consumers

- (1) The purpose of this regulation is to identify consumers who require a minimal amount of gas during a critical contingency in order to avoid serious damage to plant, or mitigate serious environmental damage, while undertaking an orderly shut down of plant in the shortest time possible.
- (2) Each retailer must, as soon as reasonably practicable after the commencement date, notify its consumers that, if they wish to be classified as minimal load consumers, they must apply to the retailer in writing and that the application can be made at any time.
- (3) A consumer must include the following information in an application to be a minimal load consumer:
 - (a) the absolute minimum level of gas supply level required to avoid serious damage to plant or mitigate serious environmental damage; and
 - (b) the period of time required for an orderly and complete shut down of plant.
- (4) A retailer must, within 10 business days of receiving an application to be a minimal load consumer, determine whether to approve or decline that consumer's application and give notice of its determination to—
 - (a) the consumer; and

- (b) if applicable, the gas distributor whose distribution system is used to distribute gas to that consumer.
- (5) A retailer must approve a consumer's application to be a minimal load consumer if all of the following criteria are met:
 - (a) the consumer would have no alternative arrangements that are economically feasible if gas supply was curtailed; and
 - (b) the consumer is operating a major item of capital plant and that plant would sustain serious damage, or significant environmental damage would likely be caused, if gas supply was curtailed; and
 - (c) the consumer can demonstrate that its annual gas consumption—
 - (i) was greater than 10 terajoules in any 12-month period within the 2 years before the consumer's application; or
 - (ii) will be greater than 10 terajoules in the 12-month period after the consumer's application.
- (6) Within 10 business days of notifying a consumer that its application to be a minimal load consumer has been approved, the retailer and the consumer must agree in writing on—
 - (a) the absolute minimum gas supply level required to mitigate serious damage to plant or significant environmental damage; and
 - (b) the period of time for which it requires a gas supply to effect an orderly and complete shut down of plant.
- (7) If a retailer reasonably considers a consumer who has been approved as a minimal load consumer no longer meets the criteria set out in subclause (5), the retailer must give notice requiring the consumer to reapply under this regulation for approval as a minimal load consumer.
- (8) To avoid doubt, a consumer remains a minimal load consumer unless it receives notice under subclause (4) that the retailer has declined its reapplication.

43A Referral of designation decision to industry body

(1) If a consumer disputes the decision to approve or decline its application to be either an essential service provider under regulation 42 or a minimal load consumer under regulation

- 43, the consumer may by notice refer the matter to the industry body for review.
- (2) As soon as practicable and no later than 10 business days after receiving notice under subclause (1), the industry body must review the decision by the retailer to approve or decline the application by the consumer and either—
 - (a) confirm the retailer's decision; or
 - (b) refer the application back to the retailer for reconsideration; or
 - (c) approve or decline the application itself in accordance with regulation 42 or 43, as applicable.
- (3) To avoid doubt, this regulation does not apply if the industry body has previously referred the application back to the retailer for reconsideration.
- (4) The industry body must, in respect of large consumers, carry out the functions of the retailer under regulations 42 and 43 (and those regulations apply with all necessary modifications).

Part 3 Critical contingency

General

44 Safety

No person is required to comply with a provision of this Part to the extent that compliance would unreasonably endanger the life or safety of that person or any other person.

Declaring critical contingency

45 Critical contingency operator must determine critical contingency

- (1) The critical contingency operator must make a determination that there is a critical contingency if—
 - (a) the critical contingency operator considers that a breach has occurred of 1 of more of the thresholds that are specified in a critical contingency management plan under regulation 25(1)(a); or
 - (b) the critical contingency operator—

- (i) has a reasonable expectation that a breach of 1 or more of those thresholds is otherwise unavoidable; and
- (ii) considers that the determination is necessary to achieve the purpose of these regulations.
- (2) When determining whether a breach of a threshold has occurred or is otherwise unavoidable, the critical contingency operator must assume that any occurring reduction in pressure in the relevant part of the transmission system will continue at a constant rate, unless the critical contingency operator has reasonable grounds for considering, based on the best available information, that a non-constant rate of reduction will provide a significantly more accurate basis for its determination.

46 Process for declaration

- (1) If the critical contingency operator determines that there is a critical contingency under regulation 45, the critical contingency operator must declare a critical contingency.
- (2) Without limiting the powers of the critical contingency operator under these regulations to declare a critical contingency, the critical contingency operator must, as soon as is reasonably possible after determining a critical contingency, give urgent notice to all affected transmission system owners—
 - (a) advising them that a critical contingency has been declared; and
 - (b) detailing the areas of the transmission system that are affected; and
 - (c) advising them that they are required to comply with any directions of the critical contingency operator; and
 - (d) advising them that communications under the communications plan are to commence immediately.

47 Authority of critical contingency operator

- (1) If the critical contingency operator declares a critical contingency, the critical contingency operator must issue directions to transmission system owners that, having regard to the nature of the critical contingency, are—
 - (a) necessary to achieve the purpose of these regulations; and

- (b) consistent with the relevant critical contingency management plans and the communications plan.
- (2) To avoid doubt, subclause (1) does not prevent the critical contingency operator issuing directions in relation to matters outside the scope of a critical contingency management plan if the critical contingency operator considers those directions are necessary to—
 - (a) achieve the purpose of these regulations; and
 - (b) mitigate the severity of the critical contingency.

48 Notification of critical contingency to certain parties

As soon as is reasonably practicable after declaring a critical contingency, the critical contingency operator must give urgent notice to the following persons that a critical contingency has been declared:

- (a) the electricity system operator; and
- (b) the director of civil defence emergency management; and
- (c) operators of gas storage facilities; and
- (d) operators of upstream gas production facilities; and
- (e) the industry body; and
- (f) the Minister of Energy and the Secretary.

49 Publish declaration of critical contingency

The critical contingency operator must, as soon as is reasonably practicable after declaring a critical contingency,—

- (a) publish a statement that a critical contingency has been declared, the date and time that the critical contingency was declared, and detail the pipeline areas affected; and
- (b) ensure an appropriate critical notice is posted on OATIS.

During critical contingency

50 Role of critical contingency operator during critical contingency

(1) For the duration of a critical contingency, the critical contingency operator must—

- (a) monitor the pressure (including linepack levels) in the section or sections of the transmission system affected; and
- (b) receive and consider communications from the transmission system owners and any other persons identified in the information guide; and
- (c) explore available opportunities to increase upstream gas production and draw on gas storage, excluding any gas stored in a transmission system or distribution system, where it would mitigate the severity of the critical contingency; and
- (d) for the purpose of stabilising the pressure (including linepack levels) in the section or sections of the transmission system affected, issue directions by giving urgent notice to transmission system owners in accordance with regulation 47 and the communications plan directing the transmission system owners to—
 - (i) implement curtailment of demand for gas in accordance with the curtailment arrangements and with these regulations; and
 - (ii) where necessary, revise curtailment of demand for gas in accordance with the curtailment arrangements and with these regulations; and
- (e) once pressure (including linepack levels) in the section or sections of the transmission system affected has stabilised to a level where the critical contingency operator is satisfied that it is appropriate to restore gas supply, give urgent notice to transmission system owners in accordance with the communications plan directing either—
 - (i) the restoration of gas supply to consumers—
 - (A) in the reverse curtailment order (last to curtail and first to restore) in accordance with Schedule 2; or
 - (B) in an order other than reverse curtailment order where it is considered by the transmission system owner and critical contingency operator to better achieve the purpose of these regulations, having regard to

the objectives and requirements set out in Schedule 2; or

- (ii) if there is a civil defence emergency, the restoration of gas supply to consumers in accordance with The Guide to the National Civil Defence Emergency Management Plan issued by the Director of Civil Defence Emergency Management under section 9(3) of the Civil Defence Emergency Management Act 2002, or any equivalent or replacement document under any subsequent replacement legislation; and
- (f) to the extent that is reasonably practicable in the circumstances, ensure the following persons are kept informed of the status of the critical contingency:
 - (i) the persons listed in regulation 48; and
 - (ii) affected transmission system owners, interconnected parties, retailers, and shippers; and
- (g) publish—
 - (i) updated information on the status of the critical contingency; and
 - (ii) all urgent notices given by the critical contingency operator.
- (2) To avoid doubt, the critical contingency operator may direct curtailment of only a subset of load within a curtailment band, if it is satisfied that direction would further the objectives set out in Schedule 2, including—
 - (a) subsets of gas-fired electricity generation, to enable remaining gas-fired electricity generation within a curtailment band to assist with voltage support or electricity system stability or both (provided the critical contingency operator has consulted with the electricity system operator); and
 - (b) subsets of geographical load.

51 Role of transmission system owner during critical contingency

If the critical contingency operator determines that there is a critical contingency under regulation 45, each transmission system owner must—

- (a) comply with the directions of the critical contingency operator given under these regulations; and
- (b) subject to paragraph (a), issue directions to retailers and large consumers—
 - (i) in accordance with these regulations; and
 - (ii) in a manner consistent with the relevant critical contingency management plan and the communications plan.

52 Retailers and large consumers must follow directions

- (1) Retailers and large consumers must, as soon as is reasonably practicable, comply with the directions of a transmission system owner given under these regulations during a critical contingency.
- (2) Retailers and large consumers must provide a transmission system owner with regular updates of—
 - (a) the retailer's or large consumer's compliance with the directions of the transmission system owner; and
 - (b) consumers' compliance with the retailer's directions issued in accordance with the directions of the transmission system owner.

Retailers to instruct consumers

- (1) As soon as is reasonably practicable after receiving a direction from a transmission system owner under regulation 52(1), retailers must give urgent notice to their consumers affected by that direction:
 - (a) directing the consumer to curtail demand in accordance with the direction from the transmission system owner; or
 - (b) if applicable, advising the consumer that its gas supply has been restored in accordance with the direction from the transmission system owner.
- (2) The urgent notice given under subclause (1)(a) must include statements as follows:
 - (a) that a critical contingency has been declared by the critical contingency operator; and
 - (b) that the critical contingency operator has issued a direction for the curtailment band that the notified consumer falls within; and
 - (c) either—
 - (i) the consumer must curtail all its demand; or

(ii) if the consumer is a minimal load consumer, gas demand must be curtailed in accordance with the agreement with the retailer under regulation 43(6).

54 Consumers to comply with directions

Consumers must comply with the directions issued by their retailer under regulation 53 as soon as is reasonably practicable.

54A Gas distributors must act reasonably

Gas distributors must not act in a manner that is inconsistent with, or would frustrate, these regulations or any directions issued under these regulations.

55 Continuing critical contingency

- (1) If a critical contingency has not been terminated under regulation 56 within 3 days from the date the critical contingency was declared under regulation 46, the critical contingency operator must give urgent notice of that situation to the industry body, the director of civil defence emergency management, the Secretary, and the Minister of Energy.
- (2) On receiving urgent notice under subclause (1), the industry body, the director of civil defence emergency management, or the Minister of Energy may require the critical contingency operator to provide any information it holds concerning the critical contingency.

Termination of critical contingency

56 Termination of critical contingency

- (1) The critical contingency operator must make a determination to terminate a critical contingency when the transmission system is capable of supplying gas to all consumers at the level at which gas was supplied immediately before the event that gave rise to the critical contingency.
- (2) To avoid doubt, the critical contingency operator may make a determination to terminate a critical contingency under subclause (1) before gas supply has been restored to all consumers.
- (3) If a critical contingency has not been terminated under subclause (1) within 12 hours from the time that the critical contingency was declared under regulation 46, the critical contingency operator may make a determination to terminate the critical contingency if it is satisfied that:

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- (a) the supply of gas into the transmission system is sufficient to meet or exceed the reasonably expected consumption of gas following the determination; and
- (b) the determination would better achieve the purpose of the regulations.

57 Process for termination

As soon as is reasonably practicable after making a determination to terminate a critical contingency under regulation 56, the critical contingency operator must give urgent notice to all affected transmission system owners advising them—

- (a) of the date and time on which the critical contingency terminates or has been terminated; and
- (b) that they must give urgent notice to all affected retailers that the critical contingency has been terminated and must direct retailers to advise their consumers that the critical contingency has been terminated; and
- (c) that they must give urgent notice to all consumers connected directly to their transmission system that the critical contingency has been terminated.

Notification of termination to certain parties

As soon as is reasonably practicable after making a determination to terminate a critical contingency under regulation 56, the critical contingency operator must give urgent notice to the following persons that the critical contingency has been terminated:

- (a) the electricity system operator; and
- (b) the director of civil defence emergency management;
- (c) operators of gas storage facilities; and
- (d) operators of upstream gas production facilities; and
- (e) the industry body; and
- (f) the Minister of Energy and the Secretary.

59 Publish termination of critical contingency

The critical contingency operator must, as soon as is reasonably practicable after making a determination to terminate a critical contingency under regulation 56, publish a statement that the critical contingency has been terminated.

Part 4 Obligations after critical contingency

Reporting requirements

60 Incident report

As soon as is reasonably practicable, but no later than 5 business days after making a determination to terminate a critical contingency under regulation 56, the critical contingency operator must, in consultation with the affected transmission system owners, prepare and publish an incident report that states the—

- (a) cause of the critical contingency; and
- (b) duration of the critical contingency; and
- (c) actions taken by the critical contingency operator and transmission system owner during the critical contingency; and
- (d) the level of general compliance by retailers and consumers with the directions of the transmission system owners and retailers during the critical contingency; and
- (e) any other matters that the critical contingency operator considers are appropriate.

61 Performance report

- (1) No later than 20 business days after making a determination to terminate a critical contingency under regulation 56, or as otherwise agreed between the critical contingency operator and the industry body, the critical contingency operator must prepare and publish a performance report that—
 - (a) assesses the critical contingency operator's and transmission system owners' compliance with these regulations and the effectiveness of the critical contingency management plan, the communications plan, and the information guide; and
 - (b) assesses the extent to which it considers that these regulations, critical contingency management plans, communications plan, and information guide achieve the purpose of these regulations; and
 - (c) identifies, where applicable, any amendments to these regulations, critical contingency management plans,

communications plan, and information guide that it considers would better achieve the purpose of these regulations.

- (2) In preparing the performance report under subclause (1), the critical contingency operator must consult with—
 - (a) the affected transmission system owner; and
 - (b) any other person it considers necessary.
- (3) If the performance report identifies an amendment to a critical contingency management plan, the transmission system owner must—
 - (a) prepare a proposed amendment to the critical contingency management plan that is consistent with the amendment identified in the performance report; and
 - (b) consult on the proposed amendment in accordance with regulation 26, except if the transmission system owner and the critical contingency operator agree that the proposed amendment is immaterial; and
 - (c) submit the proposed amendment to the industry body for approval in accordance with regulations 27 to 30.
- (4) If the performance report identifies an amendment to the communications plan or information guide, the critical contingency operator must amend and publish a revised communications plan in accordance with regulation 35 or a revised information guide in accordance with regulation 37, as applicable.

62 Assist with report

A transmission system owner must provide any information and assistance reasonably requested by the critical contingency operator for the purpose of preparing the reports under regulations 60 and 61.

Critical contingency price for contingency imbalances

Purpose of applying critical contingency price to contingency imbalances

The purpose of regulations 64 to 67 is to determine a critical contingency price to be applied to the contingency imbalances

sustained by interconnected parties and shippers during a critical contingency to—

- (a) avoid shippers instructing their suppliers of gas to reduce supply during a critical contingency when those shippers' consumers have been curtailed; and
- (b) signal to suppliers and consumers of gas that it is a scarce and valuable product during a critical contingency; and
- (c) provide incentives before a critical contingency, particularly for retailers who supply gas to consumers who are unlikely to be curtailed, to make alternative arrangements to minimise the financial consequences of a critical contingency.

64 Nominate industry expert

- (1) Each transmission system owner, interconnected party, and shipper who will be affected by the determination of a critical contingency price may nominate 1 person to be considered by the industry body when appointing an independent industry expert to determine the critical contingency price.
- (2) Each affected transmission system owner, interconnected party, and shipper must provide the name, qualifications, and industry associations of their nominee to the industry body in writing within 5 business days of the termination of a critical contingency.

65 Appoint industry expert

- (1) Subject to subclauses (2) to (4), the industry body must appoint an industry expert to determine the critical contingency price from the persons nominated under regulation 64 within 10 business days of the termination of a critical contingency.
- (2) The industry body must only appoint a person nominated under regulation 64 if the industry body considers that the nominee would be an independent and suitably qualified industry expert.
- (3) No person may be appointed as an independent industry expert under this regulation if the person—
 - (a) has a material financial interest in an industry participant; or

- (b) is a director, officer, member, employee, or trustee of an industry participant; or
- (c) is otherwise directly or indirectly materially interested in an industry participant.
- (4) If the industry body considers that none of the nominees would be an independent industry expert, the industry body has absolute discretion to appoint an independent industry expert that has not been nominated under regulation 64.
- (5) The industry body must publish the appointment of the industry expert within 2 business days of making such an appointment.
- (6) The following are both final and binding on all affected transmission system owners, interconnected parties, and shippers:
 - (a) a decision of the industry body to appoint a person as the industry expert; and
 - (b) a determination of the critical contingency price by the industry expert.

66 Terms of appointment of industry expert

- (1) The industry expert is appointed as a service provider on the terms and conditions set out in a service provider agreement.
- (2) The remuneration of the industry expert is as agreed between the industry body and the industry expert in the service provider agreement.

67 Determining critical contingency price

- (1) The industry expert must determine the critical contingency price in dollars per gigajoule.
- (2) The industry expert must seek to set the critical contingency price at a level that reflects the price that would be established by an efficient short-term market that allocated scarce gas resources to the highest value uses during the critical contingency.
- (3) If—
 - (a) only consumers in curtailment bands 0 and 1a, or 0, 1a, and 1b, were curtailed during the critical contingency, the industry expert must base his or her determination on the prices in the wholesale market for electricity dur-

- ing the critical contingency except where that would be contrary to subclause (2); and
- (b) any other circumstances apply, the industry expert must take into account the following matters:
 - (i) the prices in the wholesale market for electricity during the critical contingency; and
 - (ii) the economic cost of the loss of gas supply to those consumers who had their gas supply curtailed; and
 - (iii) any other matters that the industry expert considers relevant to achieving subclause (2).

67A Procedure for finalising critical contingency price

- (1) No later than 15 business days after being appointed under regulation 65(1), the industry expert must give notice of the proposed critical contingency price, with reasons, to—
 - (a) affected transmission system owners and affected parties; and
 - (b) the industry body; and
 - (c) any affected gas distributor, retailer, or large consumer who has advised the industry body that it wishes to receive such notice.
- (2) The persons listed in subclause (1) may make a submission, including give any relevant information, to the industry expert on the proposed critical contingency price.
- (3) Any submission must be provided to the industry expert no later than 5 business days after the notice in subclause (1) is given.
- (4) No later than 10 business days after giving notice under subclause (1), the industry expert must, after considering any submissions provided in accordance with this regulation, give notice of the critical contingency price, with reasons, to the persons listed in subclause (1)

Determining and resolving contingency imbalances

68 Contingency imbalance provisions

(1) The objectives of regulations 69 to 75 are to—

- (a) ensure the gas supplied and consumed during a critical contingency and any resulting contingency imbalances are accurately determined and allocated to affected parties; and
- (b) ensure fair, effective, and transparent arrangements are implemented for the determination, allocation, and payment of contingency imbalances between affected parties.
- (2) The industry body may perform its functions under regulations 70, 72, and 73 by entering into an arrangement or contract with any person or persons for the performance of those functions.

69 Determining contingency imbalances

- (1) Within 35 business days of the end of the month in which a critical contingency was terminated, the transmission system owner must determine the contingency imbalances for each affected party over the period of the critical contingency.
- (2) A contingency imbalance may be a positive contingency imbalance or a negative contingency imbalance, and, for the purposes of these regulations,—

(a) a negative contingency imbalance means—

- (i) for an interconnected party who injects gas into the transmission system at an interconnection point, the amount by which the quantity of gas which that party has contractually agreed to inject exceeds the measured quantity of gas injected; and
- (ii) for an interconnected party who takes gas from the transmission system at an interconnection point, the amount by which the measured quantity of gas taken exceeds the amount of gas which that party was contractually entitled to take; and
- (iii) for a shipper, the amount by which that party and its consumers have, or are considered to have as a result of any allocation results under the Gas (Downstream Reconciliation) Rules 2008, in aggregate taken more gas than the total gas which that party was contractually entitled to take; and
- (b) a positive contingency imbalance means—

- (i) for an interconnected party who injects gas into the transmission system at an interconnection point, the amount by which the measured quantity of gas injected exceeds the quantity of gas which that party has contractually agreed to inject; and
- (ii) for an interconnected party who takes gas from the transmission system at an interconnection point, the amount by which the quantity of gas which that party was contractually entitled to take exceeds the measured quantity of amount of gas taken by that party; and
- (iii) for a shipper, the amount by which that party and its consumers have, or are considered to have as a result of any allocation results under the Gas (Downstream Reconciliation) Rules 2008, in aggregate taken less gas than the total gas which that party was contractually entitled to take; and
- (c) if aggregate negative contingency imbalances exceed aggregate positive contingency imbalances, the difference will have arisen from the consumption of linepack provided by the transmission system owner to maintain gas supply during the critical contingency and must be treated as a positive contingency imbalance to be allocated to the relevant transmission system owner.
- (3) In accordance with regulations 69A to 73,—
 - (a) each party with a negative contingency imbalance is liable to pay the critical contingency price for each gigajoule of that imbalance; and
 - (b) each party with a positive contingency imbalance is entitled to receive the critical contingency price for each gigajoule of that imbalance.
- (4) In this regulation, Gas (Downstream Reconciliation) Rules 2008 includes any gas governance regulations or rules concerning downstream and upstream reconciliation.

69A Contingency imbalance calculation methodology

When determining a contingency imbalance for each affected party, the transmission system owner must—

- (a) use the best information available that is in its possession or can be obtained, or derived, without unreasonable difficulty or expense in the 35 business days after the end of the month in which the critical contingency was terminated; and
- (b) calculate the contingency imbalances for the period of the critical contingency either,—
 - (i) on a part-day basis, commencing and concluding on the nearest hour to that which the critical contingency was declared and terminated on; or
 - (ii) where the information required to calculate on a part-day basis cannot be obtained, or derived, by all transmission system owners in accordance with paragraph (a), on a whole-day basis—
 - (A) commencing at 0000 hours on the day on which the critical contingency was declared; and
 - (B) concluding at midnight on the day on which the critical contingency was terminated: and
- (c) assume that interconnected parties, retailers, and shippers, and their consumers, have complied with any curtailment directions issued by the critical contingency operator during the critical contingency when determining quantities consumed, unless there is evidence to the contrary; and
- (d) proportionally adjust quantities consumed on the basis of any evidence that interconnected parties, retailers, and shippers, or their consumers, did not comply with curtailment instructions; and
- (e) treat trades—
 - (i) purchasing gas over the transmission system as injections into the transmission system; and
 - (ii) selling gas over the transmission system as withdrawals from the transmission system; and
- (f) in respect of changes in linepack across the relevant part or parts of the transmission system affected during a critical contingency.—

- (i) if the aggregate amount of all negative imbalances over the period of the critical contingency is greater than the aggregate value of all positive imbalances, that difference will have arisen from the consumption of linepack provided by the transmission system owner to maintain gas supply during the critical contingency and is to be treated as a positive contingency imbalance to be allocated to the relevant transmission system owner; and
- (ii) if the aggregate amount of all negative imbalances is less than or equal to the aggregate value of all positive imbalances, that difference will have arisen from an increase in linepack during the critical contingency and accordingly—
 - (A) the amount of each positive contingency imbalance must be adjusted in accordance with the following formula:

$$M_A = M_{+ve} \times (\sum M_{-ve}/\sum M_{+ve})$$

where—

- M_A is the adjusted positive imbalance of an affected party (A) in gigajoules to be used in accordance with paragraph (h)
- M_{+ve} is the positive imbalance of affected party A in gigajoules
- ∑M_{-ve} is the absolute value of the total of all the negative imbalances of affected parties in gigajoules
- $\sum M_{\text{+ve}}$ is the total of all the positive imbalances of affected parties in gigajoules; and
- (B) to avoid doubt, the difference between the adjusted positive imbalance (M_A) and the unadjusted positive imbalance (M_{+νe}) in subparagraph (A) must be accounted for by transmission system owners under their

respective contractual arrangements with the affected party concerned; and

- (g) calculate the volume of each contingency imbalance for the critical contingency in gigajoules; and
- (h) calculate the value of each contingency imbalance for the critical contingency in accordance with the following formula:

$$X_A = P \times M_A$$

where-

- X_A is the amount in dollars to be received by or paid by (as applicable) a transmission system owner or affected party (A)
- P is the critical contingency price in dollars per gigajoule as notified by the industry expert in accordance with regulation 67A(4)
- M_A is the positive or negative imbalance of an affected party or a transmission system owner in gigajoules (or, if applicable, the positive imbalance as adjusted under regulation 67A(f)(ii)).

70 Industry body to hold contingency cash pool

The industry body must receive and hold the payments made in accordance with regulation 72 in a secure and separate bank account in trust for the benefit of parties with a positive contingency imbalance.

71 Transmission system owners to provide contingency imbalance information

- (1) On the next business day following the date specified in regulation 69(1), a transmission owner must provide to the industry body—
 - (a) the amounts (volume and value) of each positive and negative contingency imbalance calculated in accordance with regulations 69 and 69A; and
 - (b) the associated information used to calculate those imbalances in accordance with regulations 69 and 69A.
- (2) For the purposes of the information referred to in subclause (1)(a) and (b),—

- (a) the industry body may give notice to transmission system owners specifying the format that the information must be provided in; and
- (b) transmission system owners must provide the information to the industry body in that format.

72 Negative contingency imbalances

- (1) On the first business day of the month that is 2 months after the month in which the critical contingency was terminated, the industry body must issue invoices to affected parties with negative contingency imbalances for the amounts provided in accordance with regulation 71.
- (2) No later than the 20th day of the month after the month in which the invoice was issued, each affected party with a negative contingency imbalance determined under regulations 69 and 69A must pay the amount stated on the invoice to the industry body.

73 Positive contingency imbalances

- (1) On the first business day of the month that is 2 months after the month in which the critical contingency was terminated, the industry body must issue credit notes to affected parties and transmission system owners with positive contingency imbalances for the amounts provided in accordance with regulation 71
- (2) On the last business day of any month during which the payments required under regulation 72 have been received, the industry body must pay the amount calculated in accordance with the following formula to each transmission system owner and affected party with a positive contingency imbalance:

$$R_A = C \times (M_A / \sum M_{-ve})$$

where—

- R_A is the amount in dollars to be received by transmission system owner or affected party (A)
- C is the total amount of money in dollars held in the contingency cash pool at a specified time in relation to the relevant critical contingency

- M_A is the positive imbalance of transmission system owner or affected party A in gigajoules (or, if applicable, the positive imbalance as adjusted under regulation 67A(f)(ii))
- $\sum M_{\text{-ve}}$ is the absolute value of the total of all the negative imbalances of affected parties in gigajoules.
- (3) Subject to subclause (4), the industry body must make subsequent payments to transmission system owners and affected parties calculated in accordance with subclause (2) so that the amount stated in the credit note is fully paid out to those interconnected parties and shippers.
- (4) The industry body is not required to pay out an amount greater than the total amount of payments received under regulation 72(2) held in its contingency cash pool at that time.

73A Errors in allocated contingency imbalances

- (1) If a transmission system owner or an affected party who has been allocated a contingency imbalance under regulations 69 to 73 considers that a contingency imbalance has been calculated or allocated in error, the person must advise the industry body of the error as soon as practicable.
- (2) Subclause (3) applies if the industry body considers—
 - (a) an error has occurred; and
 - (b) the error has resulted in a materially different allocation of a contingency imbalance than would have resulted had the error not occurred.
- (3) The industry body may give notice to the relevant transmission system owners directing them to recalculate any affected imbalances in accordance with regulations 69 and 69A and resubmit the corrected contingency imbalance information to the industry body under regulation 71.
- (4) If subclause (3) applies, then the industry body must—
 - (a) immediately give notice to all affected persons of the error and that the contingency imbalances are to be adjusted based on corrected contingency imbalance information; and
 - (b) as soon as practicable after receiving the corrected contingency imbalance information under subclause

- (2), reissue invoices and credit notes under regulations 72(1) and 73(1), as applicable, for the difference between the incorrect and the adjusted contingency imbalances.
- (5) Regulations 72(2) and 73(2) to (4) apply to any adjusted contingency imbalances, with all necessary modifications.
- (6) The industry body may not give notice under subclause (2) later than 6 months after the date that the relevant critical contingency was terminated.

74 Imbalance obligations under MPOC, VTC, etc

- (1) A payment made 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.
- (2) This regulation does not limit regulation 13(2) and (3).

75 Price and imbalances provisions do not apply to regional critical contingencies

- (1) In this regulation, a regional critical contingency means a critical contingency where—
 - (a) there is a substantial reduction to, or total loss of, the supply of gas to a part of the transmission system; and (b) that part of the transmission system has become isolated from any other significant sources of gas supply.
- (2) Regulations 63 to 74 do not apply to a regional critical contingency.

Part 5 Miscellaneous provisions

76 Audits

- (1) In appointing an auditor to conduct an audit of a retailer under regulation 40, the industry body must appoint a person who is independent of, and not in a position of conflict of interest with, the retailer that is to be audited.
- (2) No officer or employee of the industry body may be appointed as an auditor.

- (3) The retailer that is to be the subject of the audit may recommend 1 or more auditors for the industry body's consideration.
- (4) In conducting an audit, the auditor may request any information from the retailer or the industry body.
- (5) The request must be reasonable and strictly for the purposes of the audit.
- (6) In providing information to the auditor, the retailer or the industry body may indicate to the auditor that the information is considered to be confidential.
- (7) The auditor must prepare a written audit report and, within the time frame agreed with the industry body, give that audit report to both the industry body and the retailer audited.
- (8) The audit report may be used—
 - (a) for the purposes of any functions or processes set out in these regulations, the Gas Governance (Compliance) Regulations 2008, and any other gas governance regulations or rules made under Part 4A of the Act; and
 - (b) by the industry body to require the retailer to provide correct information to the critical contingency operator for the purposes of regulation 38.
- (9) The retailer being audited must pay the costs of the audit.
- (10) For the purposes of this regulation, the costs of the auditor are those costs that have been agreed between the industry body and the auditor.

77 Treatment of critical contingency occurring before plans receive approval

- (1) If a national gas contingency or a regional gas contingency (as defined in the National Gas Outage Contingency Plan) occurs before the go-live date, the National Gas Outage Contingency Plan will apply to those persons participating in the National Gas Outage Contingency Plan.
- (2) To avoid doubt, before the go-live date, Parts 3 and 4 of these regulations do not apply to a national gas contingency or a regional gas contingency under the National Gas Outage Contingency Plan.

78 Separation of roles for critical contingency operator

The critical contingency operator's role under these regulations is distinct and separate from any other role or capacity, including as a transmission system owner or system operator, that the critical contingency operator may have under the MPOC, VTC (or other transmission system code) or any contractual agreement.

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Schedule 1 Critical contingency threshold limits

In accordance with regulation 25(1)(a), the permissible limits for the thresholds specified in a critical contingency management plan that apply to the following parts of the transmission system (as identified on the map published in accordance with regulation 10) are:

Pipeline	Maximum time before minimum operating pressure is reached	Minimum time before minimum operating pressure is reached	Minimum operating pressure range	Point of measurement (gate station*)
Maui pipeline				
Rotowaro	5 hours	2 hours	32 (±2.5) bar g	Rotowaro Compressor Station
Vector pipeline				
South	10 hours	3 hours	35 (±2.5) bar g	Waitangirua WTG06910
Hawkes Bay lateral	6 hours	3 hours	30 (±2.5) bar g	Hastings HST05210
Frankley Rd to Kapuni	6 hours	3 hours	35 (±2.5) bar g	Kapuni KAP09612
Bay of Plenty	6 hours	3 hours	30 (±2.5) bar g	Gisborne GIS07810
Bay of Plenty	6 hours	3 hours	30 (±2.5) bar g	Taupo TAU07001
Bay of Plenty	6 hours	3 hours	30 (±2.5) bar g	Tauranga TRG07701
Bay of Plenty	6 hours	3 hours	30 (±2.5) bar g	Whakatane WHK32101
Morrinsville lateral	6 hours	3 hours	30 (±2.5) bar g	Cambridge CAMI 7201
Central (North)	6 hours	3 hours	40 (±2.5) bar g	Westfield WST03610

	Maximum time before minimum	Minimum time before minimum		
Pipeline	operating pressure is reached	operating pressure is reached	Minimum operating pressure range	Point of measurement (gate station*)
North	6 hours	3 hours	25 (±2.5) bar g	Whangarei WHG07501
For any other gate station on the Maui or Vector pipeline	6 hours	3 bours	30 (±2.5) bar g	Gate station not specified elsewhere
*The gate station codes for the purposes of the r	*The gate station codes specified in this table refer for the purposes of the registry under those rules.	to the gas gate : codes de	stermined under the Gas (Sw	The gate station codes specified in this table refer to the gas gate : codes determined under the Gas (Switching Arrangements) Rules 2008 or the purposes of the registry under those rules.

Schedule 2

rr 5, 25, 38, and 50

Curtailment arrangements

1 Objectives of curtailment arrangements

The objectives of the curtailment arrangements set out in this schedule are to—

- (a) ensure that gas is supplied in a safe, efficient, and reliable manner; and
- (b) minimise net public cost; and
- (c) prioritise the supply of gas to essential service providers; and
- (d) allow for minimal load consumer supply; and
- (e) ensure efficient utilisation of gas in storage facilities; and
- (f) ensure effective operational management of a critical contingency.

2 Curtailment bands

Subject to regulation 50(2), during a critical contingency, the defined groups of consumers set out in the table below are to be given equal priority in terms of any curtailment required during a critical contingency.

Curtail- ment band	Consumption (TJ/annum unless specified)	Description
0		Gas offtaken for injection into gas storage.
1a	>15TJ/day	Consumers supplied directly from the transmission system and who have an alternative fuel capability. If minimal load consumer, then manage wind-down of plant.
1b	>15TJ/day	Consumers supplied directly from the transmission system that do not have an alternative fuel capability. If minimal load consumer, then manage wind-down of plant.

Curtail- ment band	Consumption (TJ/annum unless specified)	Description
2	>10TJ	Industrial and commercial consumers with alternative fuel capability. If minimal load consumer, then manage wind-down of plant.
3	>10TJ	Industrial and commercial consumers without alternative fuel capability. If minimal load consumer, then manage wind-down of plant.
4	2 to 10TJ	All consumers except for essential service providers. Minimal load consumers fully interrupted.
5	>2TJ	Essential service providers.
6	<2TJ	All remaining consumers.

3 Restoration of supply

- (1) The restoration of gas supply during a critical contingency must occur in reverse order (last curtailed and first restored) to the curtailment bands specified above.
- (2) However, the restoration of gas supply during a critical contingency may occur in a different order than that set out in subclause (1) if that order is considered by the transmission system owner and critical contingency operator, in the circumstances of the critical contingency, to better achieve the purpose of these regulations, having regard to the objectives of the curtailment arrangements as set out in this schedule.

Clerk of the Executive Council.

Explanatory note

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations provide arrangements relating to outages and other security of supply contingencies, in so far as they relate to wholesale

Gas Governance (Critical Contingency Management) Regulations 2008

markets for gas. Most of the regulations come into force on the 28th day after the date of their notification in the *Gazette*. However, Parts 3 and 4 come into force only after the industry body, the Gas Industry Company Limited, has approved critical contingency management plans to cover all of the transmission system.

Issued under the authority of the Acts and Regulations Publication Act 1989. Date of notification in *Gazette*:

These regulations are administered by the Ministry of Economic Development.