



Gas Outage and Contingency Management Arrangements

Supplementary Consultation Paper

December 2007

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:
 - the operation of gas markets;
 - access to key infrastructure; and
 - 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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1 Executive Summary

Background

- 1.1 The potential costs of a security of supply contingency are a compelling reason to have outage and contingency management arrangements that provide effective management whilst having regard to the wider costs to the economy.
- 1.2 Currently, the National Gas Outage Contingency Plan (NGOCP) is the key industry arrangement dealing with risks relating to security of supply. The NGOCP is a voluntary arrangement between industry participants, and does not impose enforceable obligations on any industry participant.
- 1.3 In August 2007 Gas Industry Co consulted on a Statement of Proposal for Outage and Contingency Management Arrangements. Submissions were received from seven submitters.
- 1.4 In October 2007 Gas Industry Co published a Submissions Analysis Paper which provided an analysis of the submissions received and, in light of submissions, a summary of the changes that Gas Industry Co intended to make to the proposed arrangements.
- 1.5 Gas Industry Co considers that the preferred approach described in its Statement of Proposal of August 2007 is sound and is the best alternative to achieve the regulatory objective. However, a number of detailed comments on aspects of the arrangements were received in submissions and through discussions with the wider industry, and following further analysis of the submissions Gas Industry Co is recommending changes to address implementation issues in a number of areas listed below.

Summary of key changes

Issue	Proposed change to Statement of Proposal
1. Avoiding deadlock in preparation of OCMP	The original Statement of Proposal included a process that provided for Gas Industry Co to approve each OCMP 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 OCMP. The revised regulations incorporate a power for Gas Industry Co to amend an OCMP and approve it if 6 months has elapsed without a plan being approved.

Issue	Proposed change to Statement of Proposal
2. Critical contingency thresholds	<p>A concern has been raised relating to the trigger (i.e. the minimum pressure and linepack thresholds) for the application of the outage arrangements being prescribed outside the regulations themselves. The alternative approach suggested is to set the thresholds in the regulations themselves.</p> <p>Gas Industry Co's view at this stage is that the existing proposal is the preferred approach. That proposal provides for those with the necessary expertise to propose the thresholds but with the necessary checks and balances (from other industry participants, the expert adviser and Gas Industry Co) to ensure the thresholds are workable for all participants.</p>
3. Curtailment	<p>A concern has been raised over the proposed arrangements requiring consumers to comply with retailers' directions in a critical contingency. The Gas Act is silent on whether regulations can require consumers that do not purchase gas from a gas wholesaler to comply with the outage arrangements. Gas Industry Co proposes to amend the regulations so that domestic consumers are excluded from having to comply with curtailment directions and are excluded from curtailment band 6 in the schedule to the regulations (the final band to be curtailed). While, in an extreme critical contingency, the ability of the CCO to direct actions to remedy the situation may as a result be slightly impaired, Gas Industry Co notes that:</p> <ul style="list-style-type: none"> • distributors also have powers acting under sections 24 and 50 of the Gas Act 1992 to assist curtailment; and • the Civil Defence Emergency Management Act 2002 may be applicable in such situations. <p>Gas Industry Co also proposes that the schedule to the regulations be amended to include objectives for the curtailment arrangements, curtailment bands and restoration processes as part of those arrangements, and the ability for Gas Industry Co to give notice of other curtailment arrangements where necessary.</p>

Issue	Proposed change to Statement of Proposal
4. Determination of Contingency Imbalances	<p>The proposal incorporates 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. Rather than specify these complexities in the regulations, it is now proposed that the details will be developed by TSOs, as part of their development of OCMPs once the regulations have been approved.</p> <p>It is further proposed that, in the period before commencement date, an industry group will be convened with a view to scoping the issues and developing solutions which TSOs can adopt in their plans.</p> <p>Gas Industry Co is proposing that it develops a set of contingency imbalance guidelines which specify those aspects of the detail that provide for a workable approach to determining contingency imbalances across MDL and Vector systems. Gas Industry Co would consult with the industry over the contents of the contingency imbalance guidelines.</p> <p>The recommended approach 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 consultation process.</p>
5. Critical contingency price	<p>The Statement of Proposal incorporated a set of criteria for an industry expert to take into account in determining the Critical Contingency Price. Submissions highlighted some deficiencies in this area. It is now proposed to replace the criteria with an overarching principle to the effect that <i>“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 critical contingency.”</i></p> <p>When setting the Critical Contingency Price, the industry expert will need to 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.</p>
6. Invoicing arrangements	<p>Gas Industry Co recommends that as well as performing the imbalance calculations each TSO should undertake the invoicing for imbalances and hold moneys in a critical contingency pool pending distribution. The contingency imbalance guidelines to be developed by Gas Industry Co will provide for the necessary fine detail to ensure the invoicing and payment processes operate smoothly between both transmission pipelines.</p>

Issue	Proposed change to Statement of Proposal
7. Information provision	The intent of the regime is that there would be two way information flows between the CCO and participants. The revised regulations clarify this point and include requirements for the CCO to provide up-to-date information during any critical contingency.
8. Cost recovery	<p>Submissions highlighted some concerns about funding the up-front development and establishment costs and indicated a preference for the costs to be spread over several years rather than funded through an initial payment.</p> <p>Gas Industry Co will seek to incorporate recovery of any development and establishment cost incurred by the CCO into the annual price for the service provider agreement and thereby spread those costs over several years. Other development costs that do not relate to the service provider agreement with the CCO will still be incurred as part of the development fee. This approach should go a long way towards alleviating stakeholder concerns in this area.</p>
9. Compliance	<p>A concern has arisen over whether the amendments to proposed Compliance regulations would adequately ensure compliance by participants with any instruction to curtail demand during a critical contingency.</p> <p>One option is to provide in the Compliance regulations for Gas Industry Co to obtain urgent orders from the Rulings Panel. However, at this stage Gas Industry Co's preference is to amend the proposed Compliance regulations to allow for interim injunctions to be sought directly from the High Court in a critical contingency event.</p>

Submissions requirements

- 1.6 Stakeholder feedback is invited on the Supplementary Consultation Paper for outage and contingency management arrangements. Gas Industry Co has previously published its analysis of submissions on the Statement of Proposal of August 2007 together with its assessment on a number of the issues that were raised.¹
- 1.7 The purpose of this Supplementary Consultation paper is to ascertain stakeholder views on proposed changes to the outage and contingency management arrangements from those previously consulted on in the Statement of Proposal. Stakeholders should be aware that the intention is not to receive stakeholder views on issues on which there has been previous consultation. Parties who wish to make a submission on the proposal are invited to respond by 5:00 pm on Monday 11

¹ Please see “*Gas Outage and Contingency Management Arrangements—Submissions Analysis and Next Steps*” available in the consultation section of the Gas Industry Co website (www.gasindustry.co.nz).

February 2008. Please note that submissions received after this date may not be able to be considered.

- 1.8 Gas Industry Co's preference is to receive submissions in electronic form (Microsoft Word format or pdf) with "Submission on Gas Outage and Contingency Management" in the subject header to submissions@gasindustry.co.nz. A hard copy would also be appreciated and should be posted to:

Ian Dempster	Tel: +64 4 494 2467
Gas Industry Co	Fax: +64 4 472 1801
Level 9, State Insurance Tower	
1 Willis Street	
PO Box 10-646	
Wellington	

- 1.9 Feedback is also sought on the draft regulations contained in Appendix B. For convenience, a Word version of the draft regulations will be made available separately on the Gas Industry Co website so that stakeholders can provide feedback by marking-up the document with suggested amendments and comments.
- 1.10 Gas Industry Co will acknowledge receipt of all submissions electronically. Please contact Ian Dempster if you do not receive electronic acknowledgement of your submission within two business days.
- 1.11 Submissions should be provided in the format shown in Appendix A. Gas Industry Co values openness and transparency and, therefore, submissions will generally be made available to the public on Gas Industry Co's website. Submitters should discuss any intended provision of confidential information with Gas Industry Co prior to submitting the information.

2 Introduction

Context

- 2.1 Gas Industry Co published a Statement of Proposal on Gas Outage and Contingency Management Arrangements in August 2007. An analysis of stakeholder submissions was published in October 2007 which identified a number of implementation issues where further details were required to confirm and refine the approach. Gas Industry Co has now further developed the proposal so as to address these issues and this paper presents the refinements to the proposed arrangements.

Terminology

- 2.2 One issue that was raised in submissions was the potential for confusion between the terminology used for outage and contingency management and that used within industry codes such as MPOC. Gas Industry Co sees merit in adopting a term that clearly distinguishes events triggered under an OCMP from situations handled through MPOC or VTC. The term to be used is '*critical contingency*'.
- 2.3 This paper has been written using the revised terminology. For reference a summary of the revised terminology and the equivalent term used in the Statement of Proposal is given below.

Table 1 – Summary of revised terminology following the Submissions Analysis

Revised terminology used in this paper	Term used in Statement of Proposal
Critical contingency	Gas contingency
Critical contingency operator (CCO)	Gas contingency operator (GCO)
Transmission system	Transmission network
Transmission system owner (TSO)	Transmission network owner (TNO)
Critical contingency price	Gas contingency price
Contingency imbalance	Contract imbalance

- 2.4 Other terms used in the Statement of Proposal have not changed.

Contents of paper

Section	Contents
3 Background	Describes the background to outage and contingency management arrangements

Section		Contents
4	Previous consultation	Provides a summary of the Submissions Analysis and lists the issues for development in this paper
5	Matters for supplementary consultation	Goes through each of the issues identified and presents the existing proposal, an analysis and recommendation
6	Next steps and implementation plan	Describes the next steps and the implementation plan in 2008

2.5 Further stakeholder input is now sought in respect of a number of the issues presented in section 5. The questions for consultation are listed in Appendix A.

3 Background

Importance of outage and contingency management arrangements

Potential cost of security of supply contingencies

- 3.1 The costs of a security of supply contingency to the economy and to individual consumers can be high – particularly if the contingency is not well managed and it leads to the supply to particular consumers being curtailed. For example:
- curtailing the gas supply to an industrial consumer may lead to a loss of production and there may be additional costs due to damage to inventory (for example raw materials that are perishable);
 - curtailing gas supply to a gas-fired electricity generator can affect not only the plant owner (who may need to purchase the lost supply from the electricity market) but can also have wider repercussions for the electricity industry depending on the availability and location of other plant to substitute for the lost generation;
 - for certain industrial processes there can be damage to the plant which means that when the gas supply has been restored, production cannot restart until parts of the plant have been rebuilt or replaced;
 - curtailing supply to a commercial consumer, although unlikely to damage plant, can have an impact on productive output due to interruption to certain processes (for example the loss of hot water and heating to commercial premises); and
 - curtailing the gas supply to residential customers will have widespread impact as heating and cooking processes using gas can no longer operate.
- 3.2 The cost of reconnecting consumers can also be significant. When supply is restored, it can simply be a case of consumers switching appliances back on. However, where the lack of supply and/or ineffective management of a supply contingency has led to a network being decommissioned, the cost of reconnection could be very high. For example, in its response to the industry consultation of July 2006, Powerco stated that *“a distribution network can take months to re-commission (for example, in the Wellington region, the gas network would take between three to four months to re-commission).”*
- 3.3 The Longford Gas Plant accident and Victorian gas supply interruption in 1998 lasted for 19 days and supplies of natural gas to domestic and industrial users were halted. Approximately 1.3 million households and 89,000 businesses were affected. It was estimated that the total cost to industry and commerce was AU\$1,300 million (source: Emergency Management Australia Disasters Database). A simple estimate based on customer numbers would suggest a cost of approximately \$250m for a similar system wide interruption in New Zealand. No allowance has been made for inflation or exchange rates, both of which would tend to increase this estimate.

3.4 The potential costs of a security of supply contingency are a compelling reason to have outage and contingency management arrangements that provide effective management whilst having regard to the wider costs to the economy.

Current arrangements under NGOCP are inadequate

3.5 Currently, the National Gas Outage Contingency Plan (NGOCP) is the key industry arrangement dealing with risks relating to security of supply. The NGOCP is a voluntary arrangement between industry participants, and does not impose any enforceable obligations on any industry participant.

3.6 Current arrangements for handling outages and contingencies under the NGOCP are inadequate and not suited to the new gas market conditions in New Zealand:

- current arrangements are not mandatory and cannot be relied upon.
- some view the existing arrangements as too Maui-centric.
- lack of legal clarity increases the risk of poor management of outages and contingencies.
- inadequate commercial arrangements – those who assist by leaving gas in the system receive no benefit from doing so.

3.7 Accordingly, Gas Industry Co was asked to assist industry participants to develop a more appropriate set of arrangements that would address the deficiencies identified with the current arrangements.

3.8 The arrangements proposed by Gas Industry Co are intended to replace only those functions of the NGOCP which are regarded as inadequate. For example, the proposed arrangements are intended to complement rather than supplant the commercial mechanisms in existing transmission codes which are designed to manage gas contingencies (for example the provisions to address a “Contingency Event” under MPOC). It is only if commercial mechanisms fail to arrest a decline in line-pack that the proposed arrangements would be triggered to curtail demand where necessary to achieve stabilisation.

Outline of process followed

3.9 Gas Industry Co began a process to consider outage and contingency arrangements some time ago, through discussions at the Wholesale Markets Working Group, release of a discussion paper in July 2006, and consideration of submissions. This process identified the key issues that needed to be addressed to establish an effective outage and contingency management regime, including the central issue of ensuring the arrangement could be enforced (i.e. relying on voluntary compliance is not sufficient).

Outline of Statement of Proposal

3.10 In August 2007 Gas Industry Co published a Statement of Proposal (and accompanying draft regulations)² setting out proposed arrangements for managing gas contingencies and outages.

3.11 The key elements of the proposal were as follows.

- Reliance on normal commercial incentives is the preferred means to ensure security of supply in most situations, i.e. price-based mechanisms should generally be used to ensure appropriate security.
- Exclusive reliance on normal commercial incentives may not deliver the best outcome in situations of extreme system stress because it is not possible for parties to trade effectively. For this reason, there is a need for mandatory demand curtailment powers as a backstop.
- Such powers would be exercised by a new service provider, the Critical Contingency Operator (CCO), engaged by Gas Industry Co and acting pursuant to regulations.
- The CCO would implement the provisions of pre-defined Outage and Contingency Management Plans (OCMPs), developed by Transmission System Owners, and approved by Gas Industry Co. The CCO would also take such other actions as are required to meet the objective in the regulations.
- Parties who suffered mandatory curtailment of their gas entitlements during a contingency would be paid by the parties who used gas to which they had no entitlement. The intention is that the price for these gas 'sales' would reflect the scarcity value during the contingency. This should enhance the incentive on parties to take appropriate steps before a contingency, and also during an event³.

² "Statement of Proposal Gas Outage and Contingency Management Arrangements", August 2007, available on the Gas Industry Co website: www.gasindustry.co.nz

³ It should be noted that the entitlements and the 'sales' relate to shippers of gas and it is not proposed that end users will participate directly in the payments and receipts. Any payments to end users who may be curtailed will be a matter between them and their respective retailers.

4 Previous consultation

Recap on submissions and key issues

- 4.1 In August 2007 Gas Industry Co consulted on a Statement of Proposal for Outage and Contingency Management Arrangements. Submissions were received from seven submitters including retailers, transporters and one consumer as shown below.

Retailers/Shippers	Transporters	Consumers
Contact	MDL	Methanex
Genesis	Vector	
Mighty River Power	Nova	

- 4.2 In October 2007 Gas Industry Co published a Submissions Analysis Paper⁴ which provided an analysis of the submissions received and, in light of submissions, a summary of the changes that Gas Industry Co intended to make to the proposed arrangements.
- 4.3 Two broad categories of issues were canvassed in submissions.
- Issues of principle – whether the ‘problem’ has been correctly identified, and whether alternative solutions to mandatory regulations might be feasible.
 - Implementation issues – assuming mandatory regulations are appropriate, whether detailed design of the arrangement can be improved.

Issues of Principle

- 4.4 Genesis raised a number of high-level concerns. In particular, it questioned whether the stated problems were the ‘root cause’ issues, and expressed concern that mis-identification of these issues would lead to the wrong solution. Mighty River Power expressed similar concerns, commenting that “while there seems to be general agreement that mandatory arrangements should be put in place this does not abrogate the need for a proper specification of the problem definition (identification of market failures)”.
- 4.5 Gas Industry Co believes these issues were addressed in the process which began in 2006, and culminated in the preparation of the Statement of Proposal. Nonetheless, given the concerns expressed by Genesis and Mighty River Power, Gas Industry Co considers it worthwhile to restate its views on these issues.
- 4.6 The first point to emphasise is that Gas Industry Co believes that reliance on normal commercial incentives is generally the best means to ensure security of supply. Put

⁴ “Gas Outage and Contingency Management Arrangements – Submissions Analysis and Next Steps”, October 2007 available on the Gas Industry Co website: www.gasindustry.co.nz.

another way, Gas Industry Co supports the use of price-based mechanisms/free bargaining as the preferred means of allocating gas in most situations.

- 4.7 However, Gas Industry Co also considers that *exclusive* reliance on this approach is not optimal from a security perspective, because there are a number of issues which mean that the outcome of "trading" will not necessarily be optimal from an economy-wide view. In other words, there are grounds for believing that various forms of "market failure" could occur.
- 4.8 These issues include:
- misalignment of incentives – the cost of an uncontrolled outage and system relight could be very large—perhaps \$250m or more based on the estimated costs from the Longford outage in Victoria. The parties who are likely to bear the greater part of this cost will generally not be the same as those making gas trading decisions in the heat of a critical gas contingency;
 - asymmetric information – timely information about the effect of the contingency on supply, and the behaviour of users is needed for parties to form reasonable views about the relative scarcity/value of gas. The facts can change rapidly, and it is difficult to gather and distribute this information in an even-handed and timely manner; and
 - perverse incentives – situations can exist where parties have a perverse incentive. For example, in a 'market-only' environment, a large gas user in a sensitive sector might deliberately use more gas than it is contractually entitled to, and seek to mitigate the adverse financial consequence by appealing for political intervention.
- 4.9 Compounding these issues, the ability of parties to allocate gas through trading is hampered by the short time period over which major action can be required. For example, an extreme situation could develop within 70 minutes of a major contingency. This leaves little time for participants to gather information, assess options, communicate with other parties to trade gas, and put plans into action.
- 4.10 To address these issues, Gas Industry Co believes it is important to put effective backstop arrangements in place.
- 4.11 MDL was the only party to recommend a completely different alternative to the arrangements in the Statement of Proposal. MDL proposed that the existing commercial arrangements contained in the MPOC (and Vector Transmission Code - VTC) be used, with modifications to make certain aspects mandatory. While Gas Industry Co concurs with the thrust of MDL's submission that commercial arrangements should be left undisturbed as far as possible, it does not agree that involuntary curtailment of consumers can be directed through the MPOC/VTC processes alone. Gas Industry Co has this view for the following reasons:
- the MPOC/VTC processes are separate and only deal with their respective pipelines;

- the proposed arrangement is more comprehensive than that recommended by MDL;
- it is not clear whether MDL's proposal would address Maui legacy gas issues; and
- there is legal uncertainty as to whether Gas Industry Co could recommend regulations that compel MDL/Vector customers to comply with instructions issued under MPOC/VTC.

4.12 The other key area of concern for some submitters was the proposed wording of the regulatory objective.

4.13 To address concerns about potential ambiguity, Gas Industry Co intends to amend the regulatory objective as follows:

~~“that arrangements are in place to achieve effective handling of a national or regional critical gas contingency without compromising long-term security of supply”.~~

4.14 Gas Industry Co considers that the preferred approach described in its Statement of Proposal of August 2007, as modified by the proposals contained in this supplementary paper, is sound and is the best alternative to achieve the regulatory objective.

Implementation Issues

4.15 A number of detailed comments on aspects of the arrangements were received. Following analysis of the submissions received, Gas Industry Co is recommending changes in the following areas:

- terminology used – see introduction section;
- imbalance calculations;
- contingency pricing;
- cost recovery;
- information provision;
- avoiding deadlock in preparation of OCMPs; and
- providing for emergency relief in the compliance regulations.

Industry Workshop

4.16 An industry workshop was held on 27 November 2007 that was attended by 16 industry participants. The purpose of the workshop was to present the refinements which Gas Industry Co had developed in response to the industry submissions. The intention was to obtain feedback from stakeholders to contribute to the development of the outage and contingency management arrangements in respect of the six implementation issues listed above.

- 4.17 Although the forum was focussed on the six implementation issues, some participants took the opportunity to question whether regulations were necessary, and suggest that development of existing industry agreements may be preferred.
- 4.18 Although there appears to be clear support for some form of mandatory arrangement, and majority support for a regulatory framework to cover outage and contingency management, some stakeholders continue to advocate alternative approaches. Gas Industry Co considers that the alternative approaches do not address the key deficiencies which have been identified.
- 4.19 Section 5 of this report deals with the refinements to the arrangements that Gas Industry Co has developed to address the implementation issues. It also identifies areas where further development of detail in the form of guidelines is required.

Board decisions

- 4.20 The Gas Industry Co Board has endorsed the following decisions.
- The regulatory objective: “to achieve effective handling of a national or regional critical gas contingency without compromising long-term security of supply”.
 - A hybrid approach to outage and contingency management combining regulations and industry arrangements that provide for mandatory demand curtailment powers to achieve effective handling of a national or a regional critical gas contingency.
 - That the necessary powers be exercised by a service provider, the CCO, engaged by the Gas Industry Co and acting pursuant to regulations.
 - That the CCO would implement the provisions of pre-defined Outage and Contingency Management Plans (OCMPs), developed by Transmission System Owners and approved by Gas Industry Co. The CCO would also take such other actions that are required to meet the objective in the regulations.

5 Matters for supplementary consultation

- 5.1 This section describes the five issues⁵ identified for further development in the Submissions Analysis paper. For each issue the paper describes the existing proposal and the comments received through the submissions process. For each issue the paper also presents Gas Industry Co's subsequent analysis and recommendation.
- 5.2 The section also includes four additional points that have arisen through discussions with the wider industry since the Submissions Analysis paper was released:
- whether the critical contingency thresholds should be contained within the OCMPs or in the regulations;
 - ability to direct curtailment in respect of domestic consumers and specifying the ; curtailment bands and arrangements in a schedule to the regulations;
 - amending the invoicing arrangements to be consistent with the proposal for the determination of contingency imbalances; and
 - urgent enforcement mechanisms where a participant has failed to comply with an instruction to curtail demand during a critical contingency.
- 5.3 For each of these four points the paper presents Gas Industry Co's analysis and recommendation.

Avoiding deadlock in preparation of OCMP

Existing proposal

- 5.4 The Statement of Proposal provided for each Transmission System Owner (TSO) to prepare a draft Outage Contingency Management Plan (OCMP). The TSO must consult with affected parties, allowing a minimum of 20 business days for consultation.
- 5.5 The OCMP for each network would be reviewed by the CCO, and the CCO is required to confirm that the plan meets the requirements of the regulations before it can be recommended for approval by the Gas Industry Co.
- 5.6 Because the CCO may face a conflict of interest, the proposal provided for Gas Industry Co to appoint an expert who can work alongside the CCO during the process of reviewing draft OCMPs. An OCMP would only come into effect if it had been approved by Gas Industry Co.

⁵ The sixth issue of terminology has already been dealt with in the introduction. The paper adopts the new terminology e.g. Critical Contingency Operator CCO (previously Gas Contingency Operator GCO).

- 5.7 Some submitters expressed concern that TSOs might have undue influence in the preparation of OCMPs. In particular, it was noted that the requirement for TSOs to prepare the OCMP for its network might produce a 'Mexican stand-off', where a TSO and Gas Industry Co become deadlocked. It was suggested that some provision be made for resolving such a situation.
- 5.8 In subsequent discussions with MDL a suggestion was made that it may be appropriate to restructure the recommendation mechanism such that the TSO prepares the draft plan, and then the CCO would make a report to the industry expert who, in turn makes a recommendation to Gas Industry Co.

Gas Industry Co's analysis and recommendation

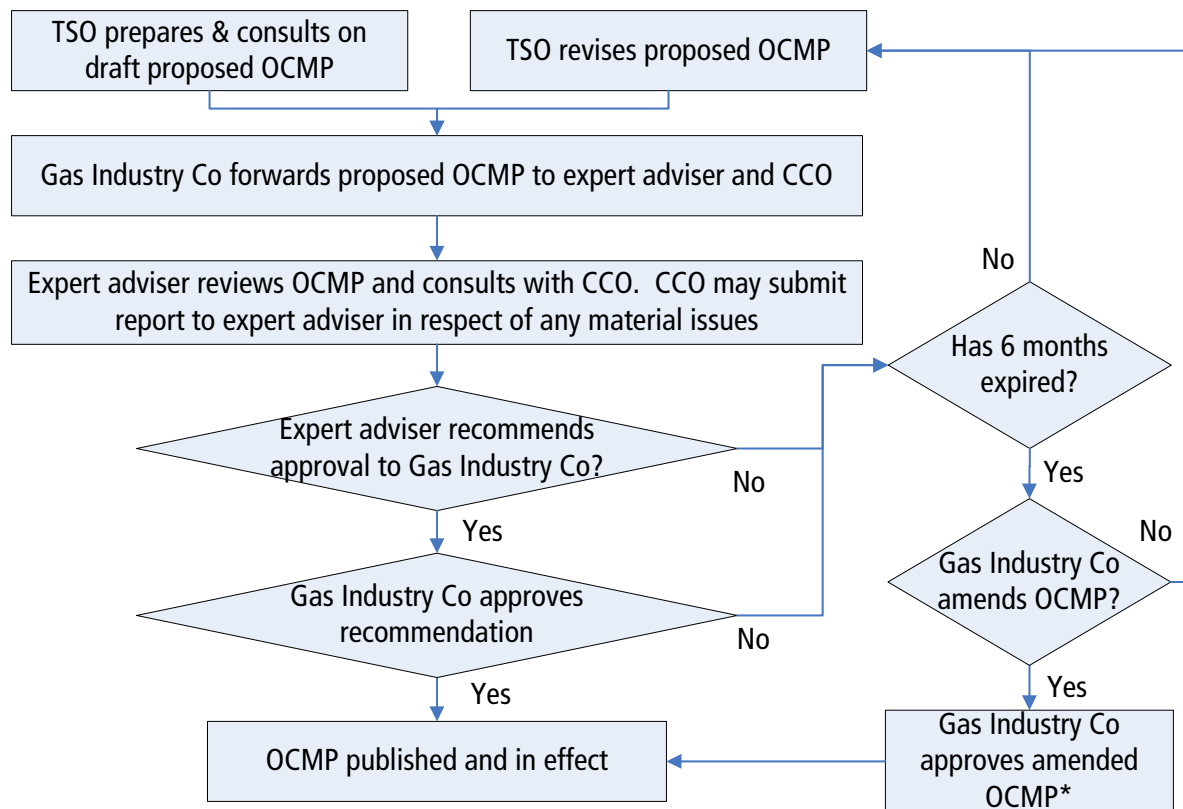
- 5.9 It is important that the TSOs are closely involved in the development of OCMPs because they are the parties with the most detailed knowledge of their networks. Furthermore, achieving TSO 'buy-in' to an OCMP is likely to be very important in ensuring effective implementation of the plan during an event.
- 5.10 Gas Industry Co proposes to amend the approvals process so that there is a hierarchy which reduces the likelihood for deadlock. Under the revised approach the expert adviser will be given the role of reviewing the proposed OCMPs, in consultation with the CCO. The CCO may submit a report to the expert adviser in which it points out any material issues with the proposed OCMPs. The expert adviser would be required to have regard to the CCO's report, but it would be the expert adviser alone who decides whether or not to recommend an OCMP to Gas Industry Co for approval.
- 5.11 The OCMPs are an important part of the arrangements and the new arrangements cannot work effectively until a set of approved plans are in place. For this reason there appears to be merit in adding a 'deadlock breaker' in the situation that either of the initial OCMPs has not been approved within a reasonable length of time.
- 5.12 Gas Industry Co proposes to change the arrangements to allow for a period of 6 months from the commencement date for the OCMPs to be approved. The period of 6 months should provide sufficient opportunity for the TSO to review and amend its proposed OCMP. For example, the maximum allowable timescales in the regulations for submitting a plan, review by expert adviser and approval by Gas Industry Co add to a total of 75 business days (approx 15 weeks) from the commencement date⁶. If a

⁶ Prior to submitting the OCMP, the TSO is required to give at least 20 business days for consultation on its draft proposed OCMP. The TSO then updates the plan as required and, no later than 50 business days after the commencement date of the regulations, the proposed plan must be provided to Gas Industry Co for its expert adviser to review – within 20 business days of receiving the proposed OCMP, the expert adviser is required to recommend to Gas Industry Co whether or not it should approve the proposed OCMP. Gas Industry Co must decide whether it accepts the proposed OCMP within 5 business days. If an OCMP is required to be resubmitted for approval, a TSO has 10 business days to submit the amended OCMP and then the expert adviser and Gas Industry Co review and approval timeframes outlined above apply again.

plan is required to be resubmitted, an additional 35 business days (7 weeks) is allowed for that process in the regulations.

- 5.13 If a plan has not been approved within the 6 months from the commencement date, then Gas Industry Co may amend the plan and approve the amended plan. Figure 1 shows the proposed process for the approvals of the OCMPs. The ability for Gas Industry Co to break any deadlock in this manner will only apply for the initial approval of the TSO’s OCMP. For subsequent amendments and updates to an OCMP, the usual review and approval process operates. So where deadlock arises in relation to such updates or amendments to an existing OCMP then the existing OCMP will continue to apply until a replacement plan is approved.

Figure 1 – Process for the approval of OCMP showing the provision for a deadlock breaker



* Amended OCMP prevails until TSO has produced a revised OCMP that has been approved

- 5.14 It should be noted that if Gas Industry Co approves an OCMP that it has amended, the TSO will (if it sees appropriate) be able to produce a revised OCMP that once approved will supersede the initial OCMP.

Q1: Do you consider the proposed deadlock breaker provision (which can only be exercised after a period of 6 months) is an appropriate mechanism to ensure the application of the regulations is not frustrated by any delay in getting the first OCMPs in place?

- 5.15 It is clear from the most recent workshop that there is considerable interest in the make-up of the OCMPs. Shippers, in particular, are keen to ensure that the transition to the critical contingency arrangements is as seamless as possible. One way to help mitigate the concerns of shippers is to convene an industry group to work through key areas of the OCMPs prior to them being prepared by the respective TSOs.
- 5.16 Gas Industry Co is concerned to achieve a balance of interests without unduly extending the timeframes already provided for under the proposed regulations. In that regard it is considered that an industry group could be working through matters of principle in relation to the OCMPs in the period between a recommendation being sent to the Minister of Energy and that recommendation being implemented by notification of the regulations in the Gazette.
- 5.17 The purpose of such an industry group would be to identify the matters of concern, to work through ways to address or ameliorate those concerns, and increase understanding by all parties of the issues and constraints (thereby increasing the likelihood that parties will accept, or at least understand the need for, the various trade-offs which may need to be part of developing an OCMP).

Critical Contingency thresholds – in OCMPs or regulations?

- 5.18 The proposed arrangements provided for the OCMPs to specify the minimum pressure and linepack thresholds which must be triggered before the CCO may determine a Critical Contingency. The TSOs, as the persons with the necessary expertise and understanding of their respective pipelines, propose the various pressure and linepack thresholds. The value of the thresholds being responsive, in that they could be amended in sufficient time to address a change in pipeline circumstances or industry dynamics, was also influential in this approach being adopted.
- 5.19 At the same time, Gas Industry Co sought to recognise the importance of the thresholds being workable for all industry participants and the thresholds achieving the purpose of the regulations. To ensure such issues would be appropriately addressed, the proposed arrangements provided for consultation, review and approval processes for the OCMPs.
- 5.20 Since submissions were received on the Statement of Proposal, some concerns have been raised with Gas Industry Co as to the appropriateness of the existing proposal. The concern relates to the application of the outage arrangements being prescribed outside the regulations. The thresholds are considered to be the trigger as to when a critical contingency is declared and when the CCO may exercise its powers under the regulations. The alternative approach suggested is to set the minimum pressure and linepack thresholds in the regulations themselves. Such an approach would provide Gas Industry Co with the responsibility of recommending the appropriate minimum pressure and linepack thresholds for the regulations, though Gas Industry Co would liaise with TSOs and other industry participants in recommending those thresholds. If the alternative approach was adopted at this stage, further time would be required both to develop the appropriate minimum pressure and linepack thresholds for the regulations and also to allow adequate discussion with industry participants on those thresholds.

- 5.21 A further consideration is the possibility that the introduction of the regulations will bring about changes in behaviour insofar as parties will have an incentive to avoid triggering a critical contingency. With experience of improved handling of contingency events within the commercial regimes, it may be appropriate in time to lower the linepack thresholds that would trigger a critical contingency.
- 5.22 Gas Industry Co's view at this stage is that the existing proposal is the preferred approach. That proposal provides for those with the necessary expertise to propose the thresholds but with the necessary checks and balances (from other industry participants, the expert adviser and Gas Industry Co) to ensure the thresholds are workable for all participants. However, Gas Industry Co would like to receive submissions from participants on this issue before adopting a final position.

Q2: *What is your view of Gas Industry Co setting the line pack and pressure thresholds as part of recommending the regulations? Do you agree that the approach set out in 5.18 and 5.19 for the setting of the minimum pressure and linepack thresholds is preferred?*

Curtailment

Existing proposal

- 5.23 The proposed arrangements provided for a curtailment schedule containing bands specifying the order for curtailment of demand. During a critical contingency the CCO would direct the curtailment of demand in the order specified in the schedule, to the extent necessary to stabilise the gas transportation network. The objectives of the curtailment bands are to minimise the net public cost of curtailments, whilst prioritising essential service providers and providing for effective management in terms of rapid reduction in the demand for gas.
- 5.24 The proposed arrangements also provided that all consumers must comply with any and all directions issued by their retailer, following a direction to curtail from the CCO, in a critical contingency.
- 5.25 Submitters were generally supportive of the curtailment bands proposed, but had some queries over the rigidity of using bands for curtailment and how the bands might operate in practice.

Gas Industry Co's analysis

Curtailment powers

- 5.26 Since submissions were received on the Statement of Proposal, Gas Industry Co has become aware of a concern over the proposed arrangements requiring consumers, including both wholesale and domestic consumers, to comply with retailers' directions. While the power to require curtailment is considered essential to the operation of effective outage arrangements, the Gas Act is silent on the ability of regulations to require consumers that do not purchase gas from a gas wholesaler to comply with the outage arrangements. The powers of the Ruling Panel are similarly restricted in this respect.

- 5.27 The proposed curtailment bands set out the final band for curtailment as being all remaining consumers who consume less than 2 terajoules per annum. This would include, for the most part, domestic consumers and other mass market customers. Therefore only in the most extreme critical contingency event would curtailment directions be issued to such consumers.
- 5.28 To mitigate the concern over the application of the arrangements to domestic consumers, Gas Industry Co considers it appropriate for the final curtailment band to expressly exclude domestic consumers and also for the regulations to clarify that compliance with any directions to curtail is not required by domestic consumers.⁷
- 5.29 That approach is considered satisfactory for two main reasons.
- While the regulations would not require domestic consumer compliance with curtailment directions, retailers are still able to request those consumers to curtail demand. Gas Industry Co understands that previous experience indicates many consumers voluntarily curtail demand in accordance with such requests. In the past, such voluntarily appeals to consumers to curtail electricity demand been considered relatively successful. Moreover, Gas Industry Co understands that several retailers have contractual arrangements with domestic consumers requiring compliance with any curtailment directions. Gas Industry Co encourages retailers to review their contractual arrangements with all consumers to provide for curtailment in a critical contingency. Also, in the medium term, Gas Industry Co intends to examine whether such curtailment provisions should be mandatory in consumer contracts, as part of its consumer outcomes and model contracts work streams.
 - While, in an extreme critical contingency, the powers of the CCO to remedy the situation may as a result be slightly impaired, Gas Industry Co notes that, under sections 24 and 50 of the Gas Act 1992, distributors are able to enter land to perform any act or operation necessary for the purpose of maintaining, or operating their fittings. This power can be exercised on an urgent basis where entry is necessary in circumstances of probable danger to life or property or where entry is necessary to maintain the continuity or safety of the supply and distribution of gas. In a severe critical contingency, where the curtailment of demand of domestic consumers was required to maintain the continuity or safety of supply, distributors could liaise with the CCO on whether exercising those powers to the assist the curtailment of demand is necessary. At that stage, the critical contingency may also be very close to being declared “an emergency” under the Civil Defence Emergency Management Act 2002.⁸ If a critical

⁷ Domestic consumer is defined in section 43D of the Gas Act 1992 as meaning “any person who purchases gas in respect of any dwellinghouse”.

⁸ An emergency under section 3 of the Civil Defence Emergency Management Act 2002 means a situation that-

(a) is the result of any happening, whether natural or otherwise, including, without limitation, any ... leakage or spillage of any dangerous gas or substance, technological failure, ..failure of or disruption to an emergency service or a lifeline utility,..; and

contingency required the curtailment of domestic consumers, the potential for safety issues arises and such curtailment instructions could be directed under those civil defence arrangements.

- 5.30 Gas Industry Co intends to monitor the effectiveness of the proposed outage arrangements following implementation and, should it be considered necessary, may seek amendment to the Gas Act 1992 to provide for express regulatory powers to implement effective contingency management arrangements for all parties (including consumers) affected by a contingency.

Curtailment bands

- 5.31 Gas industry Co acknowledges the concern over the application of curtailment bands, when it may better fulfil the purpose of the regulations to have more flexible curtailment arrangements. As an alternative, Gas Industry Co considered employing curtailment guidelines, published separate from the regulations by Gas Industry Co, to enable OCMPs to be developed with more flexible curtailment arrangements and that could be more responsive to amendment over time. However, the use of such general guidelines, for what may be considered an integral part of any outage arrangements, arguably poses a risk that the guidelines may not be empowered under the regulation making provisions of the Gas Act 1992.
- 5.32 Gas Industry Co also notes that the existing proposal to include curtailment bands in a schedule to the regulations does not prevent the CCO from directing curtailment of only a subset of load within a curtailment band. That ability is expressly provided for in the regulations.
- 5.33 As such, Gas Industry Co's proposes to retain the specification of curtailment bands in a schedule to the regulations, but provide for that schedule to be expressed to encompass broader curtailment arrangements as well. The intention is for the schedule to specify the objectives of the curtailment arrangements, outline any curtailment bands required to be specified in the OCMPs, and the order of restoration on the termination of a critical contingency. To meet the need for some flexibility, the schedule also seeks to provide for Gas Industry Co to give notice to TSOs specifying other curtailment arrangements for inclusion in OCMPs, provided those arrangements further the objectives of the curtailment arrangements as listed in the schedule.
- 5.34 One example of the need for flexibility is the value in being able to curtail only a subset of gas-fired electricity generation. Selective curtailment of such gas load may be preferable to avoid precipitating an electricity blackout in certain areas. Although full curtailment may eventually be required, the initial partial curtailment will lower the rate at which line pack is falling thus buying time which can be used to arrange for other forms of generation to be brought on.

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- (b) causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property in New Zealand or any part of New Zealand; and
 - (c) cannot be dealt with by emergency services, or otherwise requires a significant and coordinated response under this Act.

5.35 While the arrangements presented in the statement of proposal required a review of the curtailment bands within 3 years to amend the bands, Gas Industry Co now proposes that the regulations do not specify that requirement. Such a provision runs the risk of purporting to usurp the usual regulation-making powers and processes specified in the Gas Act 1992. Nevertheless, Gas Industry Co intends to carry out such a review of the curtailment arrangements within 3 years of the commencement date and use the results of such a review to assess whether a recommendation for an amendment to the curtailment arrangements in the schedule is desirable.

Recommendation

5.36 Gas Industry Co proposes that:

- the regulations be amended so that domestic consumers are excluded from having to comply with curtailment directions and are excluded from curtailment band 6 in the schedule;
- the schedule to the regulations be amended to include objectives for the curtailment arrangements, curtailment bands and restoration processes as part of those arrangements, and the ability for Gas Industry Co to give notice of other curtailment arrangements where necessary; and
- once the regulations take effect, it undertake a comprehensive study of options for improving the curtailment arrangements and, if improvements are identified, recommend that the schedule to the regulations be amended accordingly.

Q3: *Do you consider it essential for the CCO, through retailers, to be able to require domestic consumers to comply with curtailment directions or is Gas Industry Co's proposal to the exclude domestic consumers adequate for the effective operation of the outage and contingency arrangements?*

Q4: *Do you agree that the proposed curtailment arrangements outlined in 5.33 and as specified in the schedule to the regulations are appropriate?*

Determination of contingency imbalances

Existing proposal

5.37 One of the key concerns with the NGOCP, as expressed by Contact Energy and others, was the lack of any price-based, commercial mechanism that would require a party who took gas to which they had no entitlement during a contingency, to actually pay for that gas. Indeed, the NGOCP states that such gas will be repaid in kind. In order for the proposed regulations to be able to sanction such payments, there needs to be a mechanism that will allow the quantities of such gas to be measured. It is proposed that using a combination of imbalances at welded points together with the shipper mismatch mechanisms will provide the means of measuring such quantities. Shippers then become the focus for payments and receipts arising from such "contingency imbalance" quantities.

5.38 The proposed arrangements required that the quantities of gas delivered and off-taken by each party from the transmission system be calculated in order to determine

the contingency imbalances. The existing industry processes under the TSOs' codes (MPOC and VTC) would calculate contingency imbalances for parties on a daily basis. However, the determination of contingency imbalances for a Critical Contingency would need to take account of the flows during the Critical Contingency itself and it is unlikely that the start and end of a Critical Contingency will coincide with the start and end of the gas day.

- 5.39 The existing proposal required contingency imbalances for each shipper and retailer during the period of the Critical Contingency to be calculated. The process to estimate a consumer's demand would use the standard industry processes modified as necessary to take account of the extent and duration of the actual curtailment that took place during the critical contingency. The imbalance calculation for a shipper would need to make an adjustment where there was evidence that a consumer had failed to comply with the curtailment instruction issued during the Critical Contingency.
- 5.40 There were a number of concerns from submitters about the method for the calculation of imbalances, and whether the contingency period calculations will employ the same mechanisms as those used for determining imbalances in the MPOC and VTC, which are done on a daily basis. Some submitters queried what happens if a Critical Contingency commences or ends sometime during a day, rather than at the start of a day. NovaGas suggested that daily allocations should be sufficient for allocation purposes. Vector raised the question of how title tracking will occur and how imbalances in line-pack quantities will be dealt with.

Gas Industry Co's analysis

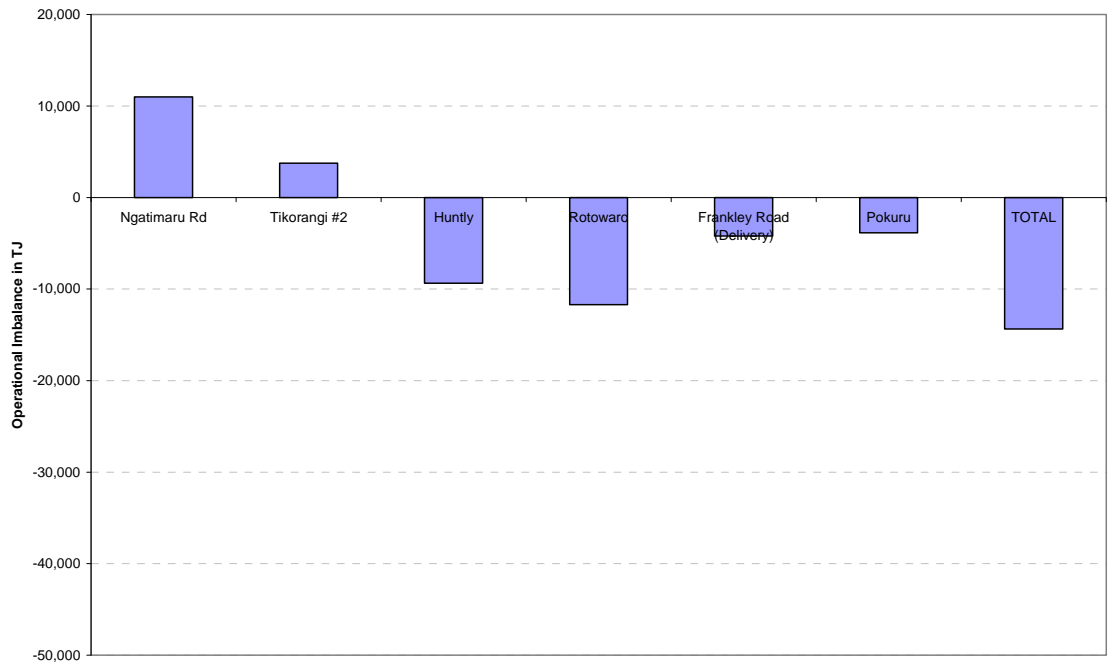
- 5.41 Gas Industry Co recognises that there are temporal and spatial issues surrounding the calculation of imbalances that will need to be further defined. Examples of these two areas are:
- the unit of time used for calculating the imbalances will need to tie in with existing industry practices – it may be that this means that the calculation of the imbalance has to cover whole gas days, in which case if a Critical Contingency were to be triggered part way through a day then it could mean that the whole day would be included in the calculation of imbalances; and
 - if only part of the transmission system were affected by a Critical Contingency, for example in a regional contingency, only the supply system downstream of the incident is likely to be affected by a shortage of gas. The other parts of the transmission system may be unaffected and able to continue to operate under the normal commercial arrangements.
- 5.42 Gas Industry Co intends that the details of these processes will be developed, with input from the industry. It is also expected that existing systems/processes will be used wherever possible, for reasons of efficiency. Gas Industry Co believes this can best be achieved by requiring TSOs to address this issue in their OCMPs. The final detail would then be exposed to industry scrutiny through the consultation process.

- 5.43 Gas Industry Co has attempted to illustrate how an hourly unit of time might be used for calculating imbalances. The purpose of this exercise was to illustrate how the new arrangements might be implemented by the TSOs.
- 5.44 Gas Industry Co has worked through an example of how contingency imbalances might be calculated using the example of the 5th June 2007 – the day on which a phase 2 contingency was declared on the Maui pipeline.
- 5.45 The following rules were applied for the purpose of calculating contingency imbalances on the Maui pipeline:
- measurement for the purposes of contingency imbalances started from the next hour bar after a Critical Contingency is declared and ended from the next hour bar after the Critical Contingency is terminated; and
 - shippers' scheduled quantities were held fixed during the period of the Critical Contingency.
- 5.46 The example demonstrated that using the hourly flow measurements at each of the Maui welded points it was possible to calculate an 'operational imbalance'⁹ for the period at each welded point. It also showed in principle that the total of the imbalances at all Maui welded points over the hours of the contingency gave the change in line-pack during the Critical Contingency.
- 5.47 The example showed that on the Maui pipeline it would be possible in principle to apply an hourly accounting of flows to determine imbalances at welded points applying the two additional rules.
- 5.48 Gas Industry Co has identified that in order to ensure that all shippers with negative imbalance positions will pay the Critical Contingency Price (see later section on the CCP), it is necessary for those negative imbalances to be cashed out in full. This means that even when that imbalance is apparently "supplied" from line-pack it needs to be cashed-out at the CCP so as to preserve the price signal. It needs to be emphasised that this is likely to be a rare situation as, in the majority of instances, the line-pack at the end of a Critical Contingency will be greater than that at the commencement of the Critical Contingency. This arrangement is included so as to preserve the price signal without over-complicating the arrangements.
- 5.49 However, feedback from the November forum indicated a significant level of concern from stakeholders about whether it would be feasible to carve out a sub-period from the day, given that the existing arrangements are geared towards daily balancing. A number of stakeholders advanced the view that the imbalance quantities and cash-out arrangements should be based on a whole day.

⁹ Operational Imbalance under MPOC is the difference between the actual quantity of gas that flowed through a welded point and the Scheduled Quantity.

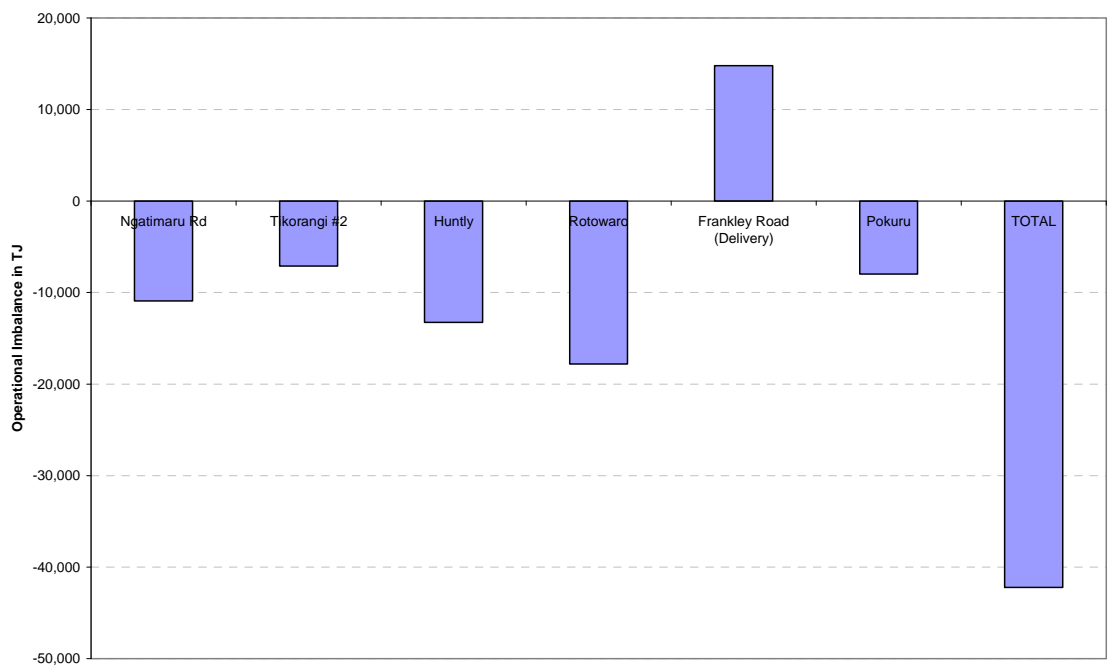
- 5.50 One of the arguments advanced was that parties are able to utilise peaking arrangements which mean that operational imbalances (both positive and negative) accrue as a normal part of day-to-day arrangements. While acknowledging this is the case, Gas Industry Co is concerned with promulgating arrangements which will incentivise all parties to endeavour to balance their injections and withdrawals, wherever possible, during the period of a critical contingency.
- 5.51 Provided a sub-day period can be measured, the contingency imbalance will be defined to be the **change** in OI over the period of the critical contingency. Thus any accumulated OI at the start of the critical contingency will effectively be netted off from the calculation. Confining the measurement to the period of the Critical Contingency means that those who exacerbate or prolong the Critical Contingency will face the contingency price for their actions.
- 5.52 Gas Industry Co considers there are significant drawbacks in using daily balancing. First, there is a risk that one or more parties may exhibit imbalance quantities which are not directly related to the critical contingency. Secondly, after the critical contingency has ceased there may be scope for parties to endeavour to adjust their positions in the remaining hours of the day so as to either take advantage of, or minimise exposure to, imbalance cash-outs.
- 5.53 Such behaviours would likely result in situations where the imbalance calculations did not provide a realistic representation of what it is that we are trying to measure, i.e. quantities of gas:
- to which shippers have no contractual entitlement but their customers have consumed; and
 - which shippers have title to but which they or their customers have been unable to access due to being forcibly curtailed.
- 5.54 The following diagrams, based on the 5 June incident, depict the differences which arise in imbalance quantities when using a measurement period confined to the duration of the critical contingency compared with using periods based on a whole day.

Figure 2 – Operational Imbalances at Welded Points affected by the Pohokura outage on 5th June: OI over 5 hours of the critical contingency



Source: Information derived from Maui Pipeline Contingency Event – 5 June 2007, Incident Report available from www.OATIS.co.nz

Figure 3 – Operational Imbalances at Welded Points affected by the Pohokura outage on 5th June: OI for the day of the critical contingency



Source: Information derived from Maui Pipeline Contingency Event – 5 June 2007, Incident Report available from www.OATIS.co.nz

- 5.55 The most obvious difference in going to a 24-hour balancing period is that the aggregate positive or negative operational imbalance becomes much greater. Primarily this reflects the loss of linepack prior to declaration of Phase 2 (likely to be equivalent to the onset of a critical contingency under the regulations). Thus, the contingency imbalances for these longer periods include imbalances that are unrelated to the critical contingency itself.
- 5.56 Given that the distortion is significant, Gas Industry Co regards it as worthwhile to undertake further investigation of what would be involved in carving out a sub-day period for the purpose of calculating contingency imbalances.
- 5.57 The analysis of the 5 June incident also highlighted a potential windfall for a producer who had triggered a force majeure event, and dis-benefit for its customers, in allowing that producer to benefit from any positive imbalance created by flowing gas once its scheduled quantity had been revised down to zero. Allowing such a situation to remain would risk creating perverse incentives for producers.
- 5.58 Gas Industry Co has considered options to address this issue and proposes the following principles:
- receipt welded points will be segregated into two classifications: those which have had their scheduled quantities revised due to an event; and the remainder which are functioning normally;
 - the welded parties at normally-functioning welded points will be eligible to receive cash-outs for positive imbalances;
 - a receipt welded point which had its scheduled quantity reduced as a result of a “contingency event” as defined in MPOC will be treated as follows:
 - the welded party is eligible to receive cash-outs only for positive imbalances arising from flows in excess of the pre-contingency scheduled quantity; and
 - any positive imbalance that arises for flows which are within the pre-contingency scheduled quantity will be allocated to the shippers who nominated gas from that receipt welded point and in proportion to their respective nominations.
- 5.59 These principles would be incorporated into the guidelines to be issued.

Q5: *Do you agree that defining contingency imbalances on a sub-day period is more likely to fulfil the objectives, and that the feasibility of this should be examined further?*

- 5.60 A separate issue arises where there is a regional contingency affecting the transportation capacity of the Vector transmission pipeline. In such a situation there is not a shortage of gas supply, rather there is a restriction in the ability to deliver gas to end users. In a regional contingency where there is no possible alternative source of supply it would not appear necessary to make allowances for the contingency

imbalances which are a feature of national contingencies. However, stakeholders may consider that there needs to be a mechanism to ration the available pipeline capacity.

- 5.61 If contingency imbalances were to be determined for a regional contingency then the simplest, and most obvious, scheme to apportion pipeline flows would be on the basis of firm capacity bookings—as these would establish rights to pipeline capacity on any given day. If an event reduces pipeline capacity then it would seem reasonable to notionally reallocate the remaining capacity pro rata with shippers' firm capacity bookings. Such an arrangement could be used as the basis for any transfer payments to be made in situations where curtailment results in certain shippers effectively giving up transmission capacity for the benefit of other shippers' customers.
- 5.62 However, stakeholders may regard such an arrangement as an unnecessary complication. A restriction in pipeline capacity is somewhat different from a shortage of gas supplies. In the case of the second there may be the ability to mitigate the effects—for example, by arranging access to backup supplies or by purchasing interruptibility from customers and the contingency imbalance payments provide an incentive for parties to seek out such flexibility. By contrast, with a transmission capacity restriction there are limited options beyond working through the curtailment schedule until off-takes are no greater than the remaining capacity of the pipeline to deliver gas.

Recommendation

- 5.63 Gas Industry Co proposes that the regulations will lay out the principles that are to be applied for the determination of contingency imbalances. Gas Industry Co is also convinced of the benefits of having the details for determining contingency imbalances developed by TSOs and contained within their OCMs.
- 5.64 The provisions specified in the OCMR for determining contingency imbalances are summarised in Table 2.

Table 2 – Provisions for determination of contingency imbalances

Hierarchy	Provisions
OCMR	<p>Calculations to use the most detailed metering data available</p> <p>Estimates of end user consumption during period of Critical Contingency will assume compliance with curtailment instructions unless evidence of non compliance</p> <p>Shippers with negative contingency imbalances pay Contingency Price</p>
OCMP	<p>Provide for the determination of contingency imbalance following a Critical Contingency</p> <p>Refer to the arrangements under the TSO's Code</p> <p>Describe the adjustments necessary to implement regulations i.e. single period for the Critical Contingency, rather than one day</p>

- 5.65 However, Gas Industry Co acknowledges that there could be a significant amount of detail to be worked through by each TSO in developing its arrangements for determination of contingency imbalances. In order to expedite the development of OCMPs, Gas Industry Co proposes that it would be appropriate for it to develop a set of contingency imbalance guidelines to provide guidance on the required detail to the TSO. The guidelines would seek to assist TSOs in developing OCMPs that are consistent with the requirements of the regulations in respect of the determination of contingency imbalances, as well as enabling the processes set out in separate OCMPs to operate in a congruous manner. The guidelines would contain details about the appropriate measurement period, invoicing and payment processes and other relevant details.
- 5.66 The effectiveness of the guidelines will be maximised by ensuring that Gas Industry Co involves the industry in development of those guidelines. To that end, it is likely that the industry group which will be working through the issues for development of OCMPs (as discussed in 5.15-5.17) will also contribute to development of the guidelines.
- 5.67 An illustration of the contingency imbalance guidelines is provided in Table 3.

Table 3 – Illustration of the details that might be contained in contingency imbalance guidelines

Hierarchy	Provisions
Contingency Imbalance Guidelines	<p>Measurement starts from the next hour bar after a Critical Contingency declared and ends from the next hour bar after Critical Contingency terminated</p> <p>Most detailed metering means hourly metering at welded points</p> <p>Hourly allocation to non-hourly metered consumers is 1/24 of daily allocation</p> <p><u>Maui pipeline</u></p> <p>Change in line-pack: when change is cashed out and when change is an adjustment to Running Operational Imbalance at welded points</p> <p><u>Vector pipeline</u></p> <p>In a regional contingency the allocation of flows through delivery WP will be made pro-rata to shipper capacity booking at WP¹⁰</p>

¹⁰ It is emphasised that the wording for the Vector pipeline is provided solely for illustration of what the guidelines might contain and does not conform with the position being recommended, i.e. that there be no transfer payments (and, therefore, no need for any mention of flow allocation in the guidelines).

- 5.68 The objective of the contingency imbalance guidelines would be to specify those aspects of the detail that provide for a workable approach to determining contingency imbalances across MDL and Vector systems. Gas Industry Co would consult with the industry over the contents of the contingency imbalance guidelines. The guidelines would need to be finalised prior to the commencement date.

Q6: *Do you agree that the Gas Industry Co should develop a set of guidelines to clarify some of the detail and help TSOs prepare plans that are workable and consistent with the regulations for determining imbalances?*

- 5.69 As noted earlier, there seems to be little advantage to putting arrangements in place requiring transfer payments in the event of regional contingency. Accordingly, Gas Industry Co recommends that the regulatory intervention in regional contingencies will not include any arrangements for payments to reflect the rationing arrangements. The draft regulations contained in Appendix B reflect this view.

- 5.70 However, in the event that stakeholders were strongly of the view that such payments were an essential part of efficiently managing regional contingencies, and those views have analytical support, then Gas Industry Co would assess those responses on their merits. If Gas Industry Co were convinced by the evidence in the submissions then it would revise the regulations to include such arrangements. As noted in the earlier discussion, it would seem that reserved firm transmission capacity would most likely be the basis for measurement of any quantities that would underpin payment arrangements.

Q7: *Do you agree that in the case of a regional contingency there is no advantage to putting in place arrangements that would require payments between shippers? If not, please explain your rationale, the way any such payment arrangement would work, and how efficiency would be improved by the requirement for such payments.*

Critical contingency price

Existing proposal

- 5.71 An industry expert would be appointed to make a determination of the critical contingency price (CCP) that is to be used for the purpose of cashing out imbalances arising during the course of a critical gas contingency. To determine the CCP the industry expert would have regard to a set of principles that are set out in the regulations.
- 5.72 Submitters suggested the use of one of the pricing arrangements under MPOC that references the price in the wholesale electricity market. Submissions also indicated that the criteria to determine the CCP should be sufficiently robust to avoid multiple interpretations of the pricing regime. Prices must also be set at a level so that there is no incentive to precipitate a critical contingency.

Gas Industry Co's analysis

5.73 Following responses from submitters, Gas Industry Co proposes that there should be an overarching principle that needs to be achieved in setting the CCP. The overarching principle for the independent expert to follow would be that:

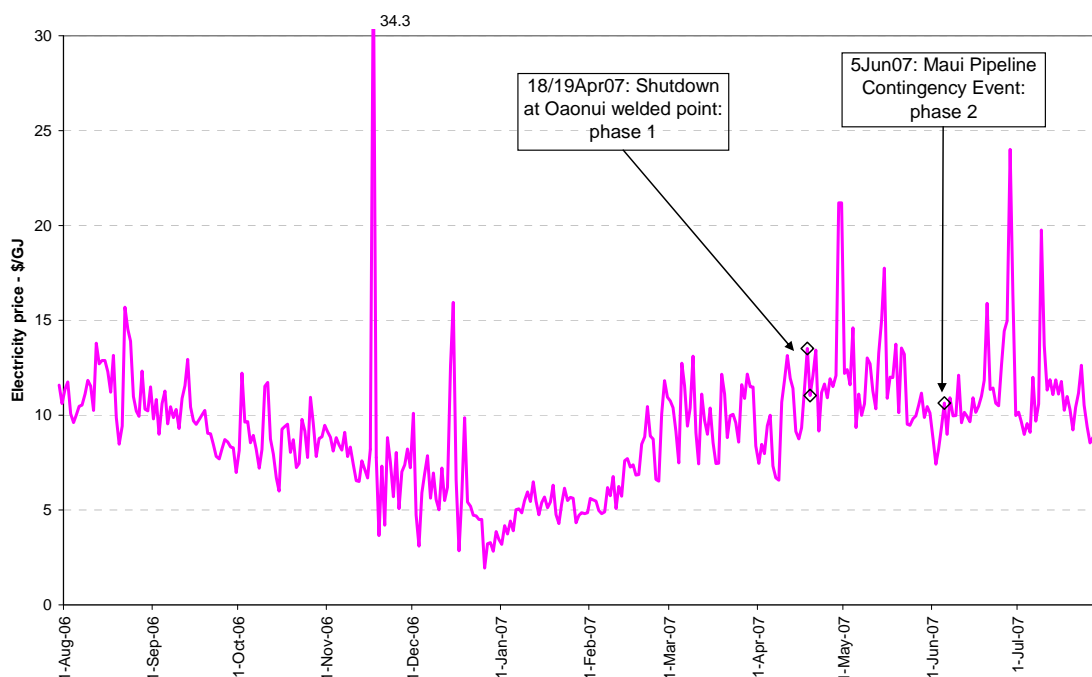
“the critical contingency price must be set at a level that reflects the price that would be established by an efficient short-term market that allocated scarce gas resources to the highest value uses during the contingency”.

5.74 As a result, the implied order of importance or weighting in the original Statement of Proposal would be removed.

5.75 Gas Industry Co has undertaken a further analysis of the pricing arrangements under MPOC. The price used for cash-out of forced operational imbalances under MPOC – the Daily Incentive Price – includes an electricity netback price which is the highest average electricity price over any two-hour period within the day. This is potentially the price under MPOC that shippers will face prior to the declaration of a CC.

5.76 The gas price equivalent has been recreated for an example of the Otahuhu pricing node. The resulting prices for a 12 month period up to the end of July 2007 are shown in Figure 4.

Figure 4 – Gas price equivalent under MPOC



Source: Electricity Commission central data set at Otahuhu node, electrical conversion efficiency 140 kWh/GJ

5.77 There is no evidence that the gas price equivalents increased at the time of the phase 1 and phase 2 contingencies in April and June 2007, and this may be because at the time of the contingencies the power generation demand was not being curtailed. This leads Gas Industry Co to suggest that the electricity prices *during* a Critical Contingency rather than in the lead up to a Critical Contingency reflect the

opportunity cost to a gas fired generator and this would be a good representation of the value of gas to an electricity generator.

- 5.78 Gas fired power generation is the first load band curtailed, and as gas demand for power generation represents over 50% of gas demand in New Zealand it is likely that the CCP based on the wholesale electricity price will be appropriate for a wide range of Critical Contingencies.
- 5.79 However, in the instance of a regional Critical Contingency occurring it is possible that power generation will not be the marginal plant curtailed: for example if there were no power generation in the affected region. In this case it is necessary to make provision for the CCP to be determined by a different means. The economic cost of the loss of gas supply to those consumers who had their gas supply curtailed would be more appropriate in this instance.

Recommendation

- 5.80 Gas Industry Co proposes that the approach to setting the CCP is changed so that the independent expert is required to set the CCP applying the following overarching principle:
- “the critical 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”.*
- 5.81 The regulations would require that the independent expert have regard to a specified list of prices including:
- prices in the electricity wholesale market during the critical contingency, used to impute a gas price; and
 - the economic cost of the loss of gas supply to those consumers who had their gas supply curtailed.
- 5.82 The regulations would specify that if gas-fired electricity generation connected to the electricity transmission grid (and therefore part of the electricity wholesale market) was the marginal gas plant curtailed then the CCP should be based on the wholesale electricity price. If this is not the case, for example in a regional contingency, or where the curtailment is deeper than power generation band, then the industry expert would be required to calculate the economic cost to the marginal consumer curtailed.
- 5.83 In calculating the price from the electricity wholesale market, the industry expert would be required to determine the appropriate node for electricity prices (we have illustrated the Otahuhu node in Figure 4), the appropriate heat rate and the cost of carbon to impute the gas price from the electricity wholesale prices.

Invoicing arrangements

- 5.84 The original proposal has Gas Industry Co issuing the invoices to shippers for the cash out of imbalances and operating a critical contingency cash pool.

- 5.85 Under the arrangements recommended in this paper the TSOs will determine the quantities of contingency imbalances. Gas Industry Co recommends that each TSO should be required under the regulations to hold a critical contingency cash pool. The TSOs would invoice the cash out of negative imbalances at the critical contingency price, hold moneys in the critical contingency pool and make payments to shippers with positive imbalances in a similar way to the role of the Gas Industry Co in the draft regulations contained in the Statement of Proposal.
- 5.86 Following further discussions with industry participants, the contingency imbalance guidelines (see section 5.65) will also be developed to provide for the necessary fine detail to ensure the invoicing and payment processes operate smoothly between both transmission pipelines.
- 5.87 Gas Industry Co would no longer be required to hold the critical contingency pool.

Q8: *Do you agree that the independent expert should be required to apply the overarching principle set out in 5.80 when determining the Contingency Price?*

Q9: *Do you agree that the independent expert should be required to have regard to the issues set out in 5.81 when determining the Contingency Price?*

Q10: *Do you agree that under the proposed arrangements where the TSO calculates the imbalances, that the TSO should operate a critical contingency cash pool?*

Information provision

Existing proposal

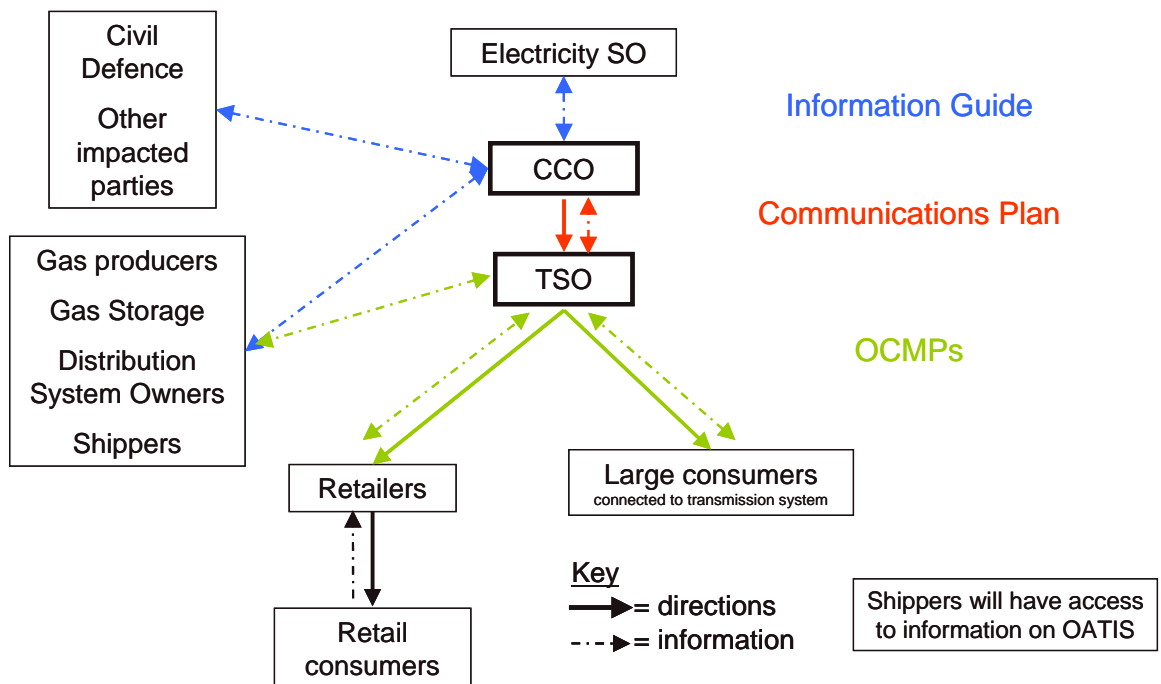
- 5.88 The Statement of Proposal contained a figure summarising the expected communication flows between the key industry players during a critical contingency. Feedback from submissions said that there should be a requirement for two-way information flow between the CCO and participants.

Gas Industry Co's analysis

- 5.89 The Gas Industry Co's intention of the original proposal was that there would be two-way information flows between the CCO and participants. The extent of the two-way flows of information was not apparent in the original figure contained in the Statement of Proposal and the figure has been updated and is shown in Figure 5. The figure shows the flows of information which are covered by each guide/plan contained in the new arrangements:

- Information Guide: communications from the CCO to and from the wider industry;
- Communications Plan: communications from the CCO to and from TSOs;
- OCMPs: communications from each TSO to retailers, large consumers and other parties connected its transmission system.

Figure 5 – Communication flows during a Critical Gas Contingency



5.90 It should also be noted that shippers will have access to information published on OATIS.

Recommendation

5.91 The existing original proposal included a requirement for the CCO to publish a notice when the Critical Contingency is declared and when the Critical Contingency is terminated. In order to help ensure ongoing communications from the CCO to the wider industry, it is now proposed that the requirement for the CCO to publish information will include a requirement to publish:

- Updated information on the status of the critical contingency; and
- All formal notices given by the CCO.

Cost recovery

Existing proposal

5.92 The Statement of Proposal recommended that the cost of implementing the new outage and contingency management arrangements be recovered from wholesale customers and retailers on the basis of annual reconciled gas volumes. The development fee is to be recovered at the time that the new arrangements start, and the ongoing fees for the year are to be charged through monthly fees. Some submitters recommended that upfront costs be recovered through time, rather than as a lump sum.

5.93 Gas Industry Co undertook to reconsider the way in which the upfront development and establishment costs are recovered, and if an efficient financing arrangement can

be secured, it would consider spreading the costs over 3 years or the duration of the service provider agreement with the CCO.

Gas Industry Co's analysis and recommendation

- 5.94 Gas Industry Co expects that the upfront and development costs are likely to include the costs of the industry expert approving the OCMPs, and any upfront charge under the service provider agreement between Gas Industry Co and the Critical Contingency Operator.
- 5.95 Gas Industry Co considers that it may be more efficient in the service provider agreement for the CCO to spread its up-front costs over the duration of the agreement and recover all of the CCO costs through an annual charge. Gas Industry Co will ask the CCO to recover any upfront fee in the CCO service provider agreement as an addition to the annual fee to be recovered by Gas Industry Co through the ongoing fee. As a result, the regulation referring to the CCO's development costs in the development fee has been amended accordingly.

Q11: *Do you agree that the CCO should be asked to spread its up-front costs over the duration of the agreement?*

- 5.96 Certain development costs will be incurred that do not relate to the service provider agreement with the CCO - for example, costs incurred by Gas Industry Co itself and the costs associated with external advisers. Gas Industry Co has also made minor amendments to the fees provisions in the draft regulations to provide greater clarity on the nature of these costs being recovered.
- 5.97 Gas Industry Co proposes to investigate the feasibility of spreading the cost recovery over a number of years. This may require some adjustment to the draft regulations to reflect the changes. However, there is the practical issue of how Gas Industry Co funds the cash flows in the meantime. The company has only a small balance sheet and, therefore, has limited ability to finance such arrangements from its own resources. This issue will need to be assessed and prioritised against other calls on balance sheet capacity.

Q12: *Do you accept the proposed approach to spreading the development costs, and that the final outcome will be dependent on Gas Industry Co's balance sheet capability?*

Compliance

- 5.98 A concern has arisen over whether the proposed Compliance regulations would adequately ensure compliance by participants with any instruction to curtail demand during a critical contingency.
- 5.99 The proposed Compliance regulations were originally designed to enforce compliance with the rules that Gas Industry Co recommended to the Minister in May 2007 for establishment of a gas registry and to regulate customer switching. At the time it was not considered necessary for the regulations to include any mechanism for obtaining urgent injunctive orders in an emergency situation – i.e. to require

compliance with any curtailment instruction. Gas Industry Co has been considering whether it is now necessary to include powers that could be exercised during a critical contingency to enforce compliance with a direction to curtail demand.

5.100 Gas Industry Co is considering two options as follows:

- **High Court** - The first option is to include in the compliance regulations a power for Gas Industry Co to obtain injunctive relief from the High Court. This is similar to the model adopted in electricity where the Electricity Commission is able to apply to the High Court for an interim injunction¹¹. The power could either be general, like in the Electricity regulations, or limited to a critical contingency.
- **Rulings Panel** - The second option is to provide a fast track mechanism in the Compliance regulations to allow the Rulings Panel to make the required orders¹². Currently the Compliance regulations require all breach allegations to proceed through an investigation phase which would likely mean any subsequent order of the Rulings Panel would take too long to obtain and, therefore, ineffective in a critical contingency where time is of the essence.

5.101 The assessment of each option is set out in the table below:

Criteria	Rulings Panel	High Court
Cost and availability	Low cost and fast subject only to availability of Rulings Panel	Higher cost and likely to take slightly longer as depends on Court processes
Legal complexity	Need only prove non-compliance with regulation	Need to satisfy usual test for interim injunction – seriously arguable question/balance of convenience
Orders able to be made	Order compliance with regulations Order penalty up to \$20,000 Costs award	Issue interim injunction requiring compliance with regulations Costs award
Enforceability	Penalty is a debt due	Court processes can be used to enforce injunction
Consequences	Breach of Rulings Panel order \$20,000 fine Failure to pay penalty a breach of regulations	Breach of interim injunction contempt of court

¹¹ See regulation 68 of the Electricity Governance Regulations 2003.

¹² The Rulings Panel may make any of the orders in section 43X(1) of the Act, including ordering a participant to comply with regulations and imposing penalties for non-compliance. All Rulings Panel orders are enforceable through the Courts.

Criteria	Rulings Panel	High Court
Appeal rights	Can appeal Rulings Panel decision to High Court on question of law	Can appeal to Court of Appeal

- 5.102 The key question is which of the two options is most likely to incentivise consumers to comply with directions to curtail demand by providing the best deterrent threat. The consequences of a Rulings Panel order are mostly financial and are the low end of the scale. The consequences of an interim injunction issued by the High Court are also financial but are likely to result in a more high profile and therefore visible breach of the regulations.
- 5.103 Gas Industry Co's current view is that the most effective mechanism would be the threat of interim injunction issued by the High Court. The balance of the current compliance regime would remain unchanged. In particular, Gas Industry Co would not be required to enter into an arrangement with the Rulings Panel to make itself available to deal with urgent applications (which could have an impact upon the Rulings Panel's costs).
- 5.104 At this stage Gas Industry Co's preference is to amend the Compliance regulations to allow for Gas Industry Co to seek urgent interim injunctions from the High Court where consumers fail to comply with directions to curtail demand. The regulations would limit the power to critical contingency events. However, this could be reviewed in the context of other gas governance arrangements such as transmission access.
- 5.105 Gas Industry Co seeks stakeholders' views on this issue.

Q13: *Do you agree that it is necessary for the Compliance regulations to include an ability to obtain urgent orders where consumers fail to comply with directions to curtail demand? If not, why not?*

Q14: *Do you agree that the ability for Gas Industry Co to apply for an interim injunction in the event that a consumer fails to comply with a direction to curtail demand would be the most effective incentive for compliance? If not, do you think the Rulings Panel would provide a sufficient incentive and if so, why?*

6 Next steps and implementation plan

- 6.1 Responses to the consultation questions are invited from industry participants and should be received by Gas Industry Co by 11th February 2008.
- 6.2 The revised timetable for implementation of the outage and contingency management arrangements is shown in Table 4 below.

Table 4 – Timetable for implementation

Target Date	Key Step
11 February 2008	Receive submissions
March 2008	Board considers recommendation
April 2008	Recommendation to Minister
April – June 2008	Working group formed to discuss OCMP issues
June 2008*	Regulations made by Governor-General and notified in the <i>Gazette</i>
July 2008*	First part of regulations take effect (requires OCMP preparation)
October 2008*	OCMPs submitted by Transmission System Owners
November 2008*	OCMPs approved by Gas Industry Co
December 2008*	Regulations become fully effective

* Indicates the earliest feasible time for implementation.

Appendix A: Recommended Format for Submissions

To assist the Gas Industry Co in the orderly and efficient consideration of stakeholders' responses on switching and registry cost allocation, a suggested format for submissions has been prepared. This is drawn from the questions posed in the body of this Statement of Proposal. Respondents are also free to include other material on switching and registry cost allocation in their responses.

Submission prepared by:..... (company name and contact)

QUESTION	COMMENT
<p>Q1: Do you consider the proposed deadlock breaker provision (which can only be exercised after a period of 6 months) is an appropriate mechanism to ensure the application of the regulations is not frustrated by any delay in getting the first OCMPs in place?</p>	
<p>Q2: What is your view of Gas Industry Co setting the line pack and pressure thresholds as part of recommending the regulations? Do you agree that the approach set out in 5.18 and 5.19 for the setting of the minimum pressure and linepack thresholds is preferred?</p>	
<p>Q3: Do you consider it essential for the CCO, through retailers, to be able to require domestic consumers to comply with curtailment directions or is Gas Industry Co's proposal to the exclude domestic consumers adequate for the effective operation of the outage and contingency arrangements?</p>	

QUESTION	COMMENT
Q4: Do you agree that the proposed curtailment arrangements outlined in 5.33 and as specified in the schedule to the regulations are appropriate?	
Q5: Do you agree that defining contingency imbalances on a sub-day period is more likely to fulfil the objectives, and that the feasibility of this should be examined further?	
Q6: Do you agree that the Gas Industry Co should develop a set of guidelines to clarify some of the detail and help TSOs prepare plans that are workable and consistent with the regulations for determining imbalances?	
Q7: Do you agree that in the case of a regional contingency there is no advantage to putting in place arrangements that would require payments between shippers? If not, please explain your rationale, the way any such payment arrangement would work, and how efficiency would be improved by the requirement for such payments.	
Q8: Do you agree that the independent expert should be required to apply the over-arching principle set out in 5.80 when determining the Contingency Price?	
Q9: Do you agree that the independent expert should be required to have regard to the issues set out in 5.81 when determining the Contingency Price?	

QUESTION	COMMENT
<p>Q10: Do you agree that under the proposed arrangements where the TSO calculates the imbalances, that the TSO should operate a critical contingency cash pool?</p>	
<p>Q11: Do you agree that the CCO should be asked to spread its up-front costs over the duration of the agreement?</p>	
<p>Q12: Do you accept the proposed approach to spreading the development costs, and that the final outcome will be dependent on Gas Industry Co's balance sheet capability?</p>	
<p>Q13: Do you agree that it is necessary for the Compliance regulations to include an ability to obtain urgent orders where consumers fail to comply with directions to curtail demand? If not, why not?</p>	
<p>Q14: Do you agree that the ability for Gas Industry Co to apply for an interim injunction in the event that a consumer fails to comply with a direction to curtail demand would be the most effective incentive for compliance? If not, do you think the Rulings Panel would provide a sufficient incentive and if so, why?</p>	

Appendix B: Draft Gas (Outage and Contingency Management) Regulations 2008

DRAFT GAS (OUTAGE AND CONTINGENCY MANAGEMENT) REGULATIONS 2008

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1 Title

These regulations are the Gas (Outage and Contingency Management) Regulations 2008.

2 Commencement

- (1) Except as provided in subclause (2), the regulations come into force on the 28th day after the date their notification in the *Gazette*.
- (2) Parts 3 and 4 of the regulations come into force on the go-live date.

3 Purpose

- (1) The purpose of these regulations is to achieve the effective handling of gas outages and contingencies without compromising long-term security of supply.
- (2) These regulations provide for –
 - (a) The appointment of a critical contingency operator; and
 - (b) A process for managing a critical contingency; and
 - (c) Processes for determining gas imbalances resulting from a critical contingency and setting a price to apply to those gas imbalances.

Part 1

General provisions

4 Interpretation

- (1) In these regulations, unless the context otherwise requires,-

Act means the Gas Act 1992;

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 which 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(1);

Commission means the Energy Commission established under S43ZZH of the Act;

communications plan means the plan published by the critical contingency operator under regulation 34;

consumer –

- (a) Means any person who is supplied, or applies to be supplied, with gas: but
- (b) Does not include a transmission system owner or any gas distributor or gas retailer, except where the transmission system owner or, as the case may be, the gas distributor or gas retailer is supplied, or applies to be supplied, with gas for its own consumption and not for the purposes of re-supply to any other person;

consumer installation means one 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 guidelines means the guidelines published by the industry body in accordance with regulation 33;

critical contingency means a critical contingency as determined by the critical contingency operator in accordance with regulation 44;

critical contingency operator means the person appointed in accordance with regulation 5(1) to be the critical contingency operator;

critical contingency operator service provider agreement means the agreement between the industry body and a person, where that person is appointed as the critical contingency operator;

critical contingency price means a price determined by the industry expert under regulation 66;

curtailment arrangements means the curtailment arrangements set out in the Schedule;

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 a system operator as defined in Part A of the Electricity Governance Rules, or any person appointed to an equivalent or replacement role under any subsequent replacement legislation;

essential service provider means a person that has been approved as an essential service provider under regulation 41;

expert adviser means a person appointed by the industry body in accordance with regulation 25 to be the expert adviser in respect of a proposed outage and 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) Two gas distribution systems;

go-live date means 5 business days after the day on which the industry body publishes a statement in accordance with regulation 30(1);

industry body means the industry body approved by the Governor General by Order in Council under section 43ZL of the Act. In the event that the industry body is revoked under section 43ZM of the Act, all references to the industry body shall be replaced with references to the Commission;

industry expert means a person appointed by the industry body in accordance with regulation 64;

information guide means the guide published by the critical contingency operator under regulation 35;

interconnected party means any person who has an interconnection agreement with a transmission system owner to receive gas at an interconnection point on the transmission system;

large end user 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 9 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 42;

National Gas Outage Contingency Plan or NGOCP means the document entitled “Gas Contingency: A Plan for the New Zealand Natural Gas Industry to Manage the Interruption of Gas Supplies” version 2.3 dated 1 December 2005;

OATIS means the online interactive open access transmission information system that is used to facilitate the open access regime under MPOC;

outage and contingency management plan means a plan approved by the industry body under regulation 28 or 29;

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 website; 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 website established in accordance with regulation 8; 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 means any person who supplies gas to another person or other persons through the transmission system or through a distribution system which is connected to the transmission system for any purpose other than for re-supply by the other person or persons;

shipper means a person with a valid and subsisting agreement 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 operates 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 a interconnected 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 9;

transmission system code means any code which sets out detailed rules covering 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;

5 Appointment of critical contingency operator

- (1) The industry body may, from time to time, by agreement with a person appoint that person to act as the critical contingency operator.
- (2) The critical contingency operator has the functions, rights, powers, and obligations set out in these regulations.
- (3) The industry body may at any time terminate, re-appoint, or change the appointment of 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 will be agreed as 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 functions, rights, powers and obligations of the critical contingency operator under these regulations.
- (6) If a person is the system operator of all of the transmission system –
 - (a) The industry body will appoint that person as the critical contingency operator for an initial term of 5 years beginning on the commencement date and on the terms of the critical contingency operator service provider agreement; and
 - (b) The industry body may terminate the critical contingency operator service provider agreement between the industry body and such a person if at any time that person ceases to be the system operator for any or all of the transmission system; and
 - (c) Any appointment beyond the initial term will be at the industry body's sole discretion.

6 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) Remuneration of the critical contingency operator; and
- (b) Appropriate provision for liability cover; and
- (c) Preparation and approval of outage and contingency management plans; and
- (d) Testing of plans and procedures; and
- (e) Publishing a communications plan and information guide.

7 Publication of critical contingency operator service provider agreement

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

8 Critical contingency website

- (1) Prior to the go-live date, the critical contingency operator in consultation with the industry body must design a critical contingency website for the purpose of providing a central repository for publicly available information relevant to a critical contingency.
- (2) The critical contingency website must be functional and available to the public on the go-live date.
- (3) The critical contingency operator must ensure the information on the critical contingency website is accurate and up to date.
- (4) The critical contingency operator must publish on the critical contingency website all information provided to it by the industry body for the purposes of publication by the industry body. For the purposes of these regulations, such information will be deemed to have been published by the industry body.

9 Publication of the 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), Part 5, Schedule 1 of the Gas (Information Disclosure) Regulations 2007.
- (2) As soon as practicable after receiving the information described in subclause (1) and consulting with all transmission system owners, the industry body must publish a map depicting the transmission system.
- (3) On the go-live date, or as soon as practicable thereafter, the industry body must publish a map depicting the transmission system on the critical contingency website.
- (4) 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 any such error or change.
- (5) The industry body may amend or update the boundaries of, and pipelines comprising, the transmission system from time to time in response to any notice given by a transmission system owner under subclause (4) and, where applicable, must publish an updated map depicting the transmission system.

10 Performance standards

- (1) 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) Prior to 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 11, the industry body may revoke, amend or add to, any performance standards set under this regulation.

11 Review of critical contingency operator performance by the industry body

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

Scope

12 Relationship with NGOCP and transmission system codes

- (1) With effect from the go-live date –
 - (a) These regulations will replace the National Gas Outage Contingency Plan; and
 - (b) The National Gas Outage Contingency Plan will cease to have effect except in so far as it relates to events and obligations and liabilities occurring or arising prior to the go-live date.
- (2) Parties to the MPOC and any other transmission system code are relieved from any obligations imposed on them by those codes to the extent that those obligations are inconsistent with these regulations.

13 Civil Defence Emergency Management Act

Compliance with the Civil Defence Emergency Management Act 2002 shall take priority over compliance with these regulations to the extent that a person shall not be required to comply with these regulations where such compliance prevents that person from complying with the requirements of that Act.

Funding

14 Development fee

- (1) The development fee is a fee to meet the critical contingency development costs.
- (2) As soon as practicable after the commencement date, the industry body must determine the estimated critical contingency development costs. The critical contingency development costs will include –
 - (a) The costs associated with:
 - (i) The appointment of the critical contingency operator; and
 - (ii) The review and recommendation for approval of proposed outage and contingency management plans under regulations 24 to 28; and
 - (b) The costs (if any) payable by the industry body to the critical contingency operator in respect of the development and establishment of any contingency and outage management arrangements required under these regulations; and
 - (c) The costs of the industry body in connection with the development and establishment of the contingency and outage management arrangements; and
 - (d) Any other costs that form part of the critical contingency development costs (whether or not such costs have been incurred at the time that the critical contingency development costs are estimated).
- (3) Once it has estimated the critical contingency development costs, the industry body will publish those costs, including a breakdown of the costs, on the industry body's website.
- (4) Every person who purchases gas directly from gas producers during the month prior to the commencement date is liable to pay a development fee in accordance with these regulations.
- (5) The development fee payable by each person who is liable to pay a development fee is calculated as follows:

$$A = B \times (C/D)$$

Where:

A = the development fee payable by person A; and

B = the estimated critical contingency development costs; and

C = the total quantity of gas purchased by person A directly from gas producers during the 12 months prior to the commencement date; and

D = the total quantity of gas purchased directly from all gas producers during the 12 months prior to the commencement date.

15 How and when development fee must be paid

- (1) The development fee is payable to the industry body.
- (2) Every person who is liable to pay a development fee must supply to the industry body a return no later than 10 days after the commencement date.
- (3) The return must state-
 - (a) The total number of gigajoules of gas that the person purchased directly from gas producers during the 12 months prior to the commencement date; and
 - (b) How many gigajoules of gas were purchased from each gas producer during that 12 month period.
- (4) As soon as practicable after receipt of the return required under regulation 14(2), the industry body must invoice the person who supplied the return for the development fee calculated in accordance with regulation 14(5).
- (5) As soon as practicable after the go-live date, the industry body must determine the actual critical contingency development costs in accordance with regulation 14(2).
- (6) The industry body must invoice or credit each person liable to pay the development fee with the difference between the actual critical contingency development costs and the amount of the estimated critical contingency development costs paid by that person.
- (7) The due date for the payment of the development fee is the tenth business day after the person receives an invoice for the development fee.

16 Ongoing fees

- (1) The ongoing fees are monthly fees to meet the critical contingency ongoing costs.
- (2) As soon as practicable after the go-live date, the industry body must determine the estimated critical contingency ongoing costs for the first year or part year of operation of the outage and contingency management plans.
- (3) The critical contingency ongoing costs will include –
 - (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 role under these regulations; and

- (c) The costs of the industry body associated with contingency and outage management and its role under these regulations during that year; and
 - (d) Any other costs that are determined by the industry body to form part of the critical contingency ongoing costs.
- (4) Once it has determined the estimated critical contingency ongoing costs for the first year or part year of operation, the industry body will publish those costs (including a breakdown of the costs).
 - (5) 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.
 - (6) The ongoing fees payable by each person who purchases gas directly from a gas producer are calculated as follows:

$$A = B \times (C/D)$$

Where:

A = the ongoing fees payable by person A; and

B = the estimated critical contingency ongoing costs for that month; and

C = the total quantity of gas purchased by person A directly from gas producers during the month prior to month B; and

D = the total quantity of gas purchased directly from gas producers during the month prior to month B.

17 How and when ongoing fees payable

- (1) The ongoing fees are payable to the industry body.
- (2) As soon as practicable after publication of the estimated critical contingency ongoing costs for the first year or part year of operation, the industry body must notify all persons liable to pay ongoing fees of the ongoing fees payable in that year or part year.
- (3) For each year following the first year or part year of operation, the industry body must estimate the critical contingency ongoing costs and notify all persons liable to pay the ongoing fees at least 2 months prior to the beginning of that year of the ongoing fees payable in that year.
- (4) Every person who is liable to pay ongoing fees for a month must supply to the industry body a return no later than the 10th day of that month, unless otherwise agreed by the industry body.
- (5) The return must state-
 - (a) The total number of gigajoules of gas that the person purchased directly from gas producers during the previous month; and

- (b) How many gigajoules of gas were purchased from each gas producer during that month.
- (6) As soon as practicable after receipt of the return required under subclause (4), the industry body must invoice the person who supplied the return for the ongoing fees calculated in accordance with subclause 16(6).
- (7) The ongoing fees for a month are due and payable on the 20th day of the month.
- (8) As soon as practicable after the end of each year, the industry body must determine the actual critical contingency ongoing costs for that year. The industry body must invoice or credit each person liable to pay ongoing fees during that year with the difference between the actual critical contingency ongoing costs and the amount of the estimated critical contingency ongoing costs paid by that person.
- (9) The industry body must ensure that all information and returns that are supplied under regulations 14 to 17 are used only for the purposes of collecting the development fee and the ongoing fees.
- (10) Subject to the consent of the persons which supplied them, the returns supplied to the industry body under regulation 7 of the Gas (Levy of Industry Participants) Regulations 2007 or its replacement will be sufficient to fulfil the requirements of subclause (4).

18 General provisions regarding fees

- (1) Any person who is liable to pay any ongoing fees under regulations 14 to 17 inclusive, and who fails to make payment of such ongoing fees on or before the date on which it falls due, is liable to pay an additional fee of 10% of the amount of the ongoing fees that are unpaid.
- (2) The additional fee becomes payable and due on the 10th business day after the date that the industry body notifies the person that an additional fee is payable.
- (3) The fees payable under regulations 14 to 18 and any additional fee payable under subclause (1) 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 will be added to any invoices issued to persons by the industry body under regulations 15(4) or 17(6).

Notices and receipt of information

19 Giving of notices

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 facsimile to the nominated facsimile 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.

20 When notices taken to be given

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 mail 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.

21 Formal notices

- (1) In relation to a critical contingency, these regulations provide for formal notices to be given in certain circumstances.
- (2) Despite regulations 19 and 20, a formal notice may be given orally where the person issuing a formal notice considers that the urgency of the situation means the notice should not be given in writing.
- (3) If a formal notice is given orally under subclause (2), the person who gave that formal notice must, as soon as is practicable, confirm that formal notice in writing in accordance with regulations 19 and 20 .

Part 2

Obligations prior to a critical contingency

Outage and contingency management plans

22 Outage and contingency management plan

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

23 Content of outage and contingency management plan

- (1) A proposed outage and contingency management plan must be consistent with the regulations and must include –
- (a) Either:
 - (i) The minimum pressure threshold required to maintain the continued supply of gas across the relevant part or parts of the transmission system as measured at various points on the transmission system (such points to be determined by the transmission system owner); or
 - (ii) The minimum linepack threshold required to maintain the continued supply of gas across the relevant part or parts of the transmission system stating the uniform pressure on which linepack is based; and
 - (b) A description of the events that the transmission system owner considers may feasibly result in a breach of the relevant thresholds as advised under subclause (a); and
 - (c) Actions that the transmission system owner considers it may feasibly take to remedy any breach in the thresholds resulting from the events described at subclause (b); and
 - (d) A process, consistent with the curtailment arrangements, 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 the Schedule; and
 - (e) Communications that the transmission system owner must initiate by notice to other transmission system owners, operators of gas distribution systems, retailers, large end users and any other person it considers necessary prior to and during a critical contingency, the reciprocal communications and timeframes within which such communications are to take place; and
 - (f) The contact details of a suitably qualified person 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) Directing compliance with the outage and contingency management plan; and

- (g) The circumstances, if any, in which the transmission system owner is likely to restore gas supply in an order that is different from the reverse order of any curtailment bands (last curtailed and first restored) set out in the curtailment arrangements; and
 - (h) A process, consistent with the contingency imbalance guidelines, outlining the manner in which the contingency imbalances will be determined for each affected interconnected party, retailer and shipper 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 interconnected parties, retailers and shippers; and
 - (iii) How and when payments are to be made by transmission system owners, affected interconnected parties, retailers and shippers for 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 end users 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) Such other things as the transmission system owner considers appropriate to give effect to the purpose of the regulations.
- (2) Subject to subclause (1) but without limiting the discretion of the industry body under regulations 28 and 29, a proposed outage and contingency plan should only modify any existing arrangements set out in MPOC or any other transmission system code to the extent necessary to better give effect to the purpose of the regulations.

24 Process for preparing outage and contingency management plan

Prior to submitting the proposed outage and contingency management plan to the industry body for approval, a transmission system owner must –

- (a) Consult on a draft of the proposed outage and 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 outage and contingency management plan; and
- (b) Immediately prior to consulting under subclause (a), provide a draft of the proposed outage and contingency management plan to:
 - (i) the critical contingency operator; and
 - (ii) the industry body, who must also **publish** the draft of the proposed plan.
- (c) Give persons consulted with under subclause (a) at least 20 business days to make submissions to the transmission system owner on the draft of the proposed outage and 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 any necessary amendments to the proposed outage and contingency management plan.

25 Appoint expert adviser

- (1) Within:
 - (a) 30 business days of the commencement date; or
 - (b) 5 business days of receiving a proposed amendment to an outage and contingency management plan from a transmission system owner under regulations 31(4)(c), 32(6)(c) or 60(3)(c);

whichever is applicable, the industry body must appoint an expert adviser to review, a proposed outage and contingency management plan or a proposed amendment to an outage and contingency management plan.

26 Expert adviser to consult critical contingency operator

- (1) As soon as practicable following receipt of a proposed outage and contingency management plan under regulation 22 or proposed amendment under regulations 31(4)(c), 32(6)(c) or 60(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 outage and contingency management plan or proposed amendment under regulation 27, 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 outage and contingency management plan or proposed amendment in relation to any issues it perceives as material to the review by the expert adviser under regulation 27.
- (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 outage and contingency management plan or proposed amendment was received from the industry body.
- (5) In reviewing the proposed outage and contingency management plan or proposed amendment under regulation 27, the expert adviser:
 - (a) shall have regard to any report submitted in accordance with subclauses (3) and (4).
 - (b) may have regard to any submissions received by the transmission system owner under regulation 24; and

27 Review of an outage and contingency management plan

- (1) The expert adviser appointed under regulation 25 will review:
 - (a) A proposed outage and contingency management plan provided by a transmission system owner under regulations 22 or 28(3); or
 - (b) A proposed amendment to an outage and contingency management plan under regulations 31(4)(c), 32(6)(c) or 60(3)(c);to determine whether or not to recommend approval of the proposed outage and contingency management plan or proposed amendment to the industry body.
- (2) Following the review and no later than 20 business days of receiving the proposed outage and contingency management plan or proposed amendment, the expert adviser must:
 - (a) make a recommendation, with reasons, to the industry body, on whether or not the industry body should approve the proposed outage and 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.
- (3) If the expert adviser considers that the proposed outage and contingency management plan or proposed amendment complies with regulation 23 and gives effect to the purpose of the regulations, the expert adviser must make a recommendation that the industry body should approve the proposed outage and contingency management plan or proposed amendment.

- (4) If the expert adviser gives notice under subclause (2)(b) that it has recommended that the proposed outage and contingency management plan or proposed amendment should not be approved by the industry body, no later than 10 business days after receiving that notice the relevant transmission system owner:
- (a) must revise the proposed outage and 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 .
- (5) Regulations 25, 26, 27 and 28 apply to a proposed plan or proposed amendment resubmitted for approval under subclause (4).

28 Approval of outage and contingency management plan

- (1) No later than 5 business days after receiving a recommendation to approve under regulation 27(2), the industry body must:
- (a) approve or decline to approve the proposed outage and contingency management plan or proposed amendment; and
 - (b) give notice to the relevant transmission system owner and the critical contingency operator and of its determination and the reasons for its determination.
- (2) The industry body must approve the proposed outage and contingency management plan or proposed amendment if –
- (a) it receives a recommendation for approval from the expert adviser under regulation 27(3); and
 - (b) the industry body considers that the proposed outage and contingency management plan or proposed amendment complies with regulation 23 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 outage and contingency management plan or proposed amendment, no later than 10 business days after receiving that notice, the relevant transmission system owner:
- (a) must revise the proposed outage and 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 25, 26, 27 and 28 apply to a proposed plan or proposed amendment resubmitted for approval under subclause (3).

29 Amendment of plan by industry body where deadlock exists

- (1) This regulation only applies where a proposed outage and contingency management plan, submitted under regulations 22, 27(4)(a) or 28(3)(a), has not been approved by the industry body under regulation 28 within 6 months of the commencement date
- (2) To avoid doubt, this regulation does not apply to any proposed amendment to an outage and contingency management plan,
- (3) The industry body may itself amend the proposed outage and contingency plan, provided such amendments are:
 - (a) related to the reasons set out in any notice referred to in regulation 27(4) or 28(3); and
 - (b) considered necessary by the industry body to ensure the proposed outage and contingency management plan complies with regulation 23 and gives effect to the purpose of the regulations.
- (4) Where the industry body amends the proposed outage and 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 5th business day after giving notice under subclause (4), the industry body must determine whether or not to approve the proposed outage and contingency management plan as amended under subclause (3).

30 Publish outage and contingency management plans

- (1) As soon as practicable after the industry body is satisfied that it has approved outage and contingency plans to cover all of the transmission system, the industry body must publish a statement specifying:
 - (a) it has approved outage and contingency plans to cover all of the transmission system; and
 - (b) the go-live date that, pursuant to regulation 2, parts 3 and 4 of the regulations come into force on.
- (2) No later than 5 business days after the industry body publishes a statement under subclause (1), the critical contingency operator must publish the outage and contingency management plans on the critical contingency website, except as provided in subclause (3).
- (3) The critical contingency operator must not publish any information in the outage and contingency management plans that it considers is confidential or commercially sensitive.
- (4) If any dispute or issue is raised regarding the publication of information in the outage and contingency management plans, the dispute or issue may be referred to the industry body for determination as to what is and what is not appropriate for publication.

31 Maintaining outage and contingency management plan

- (1) A transmission system owner must ensure the contact details included in its outage and contingency management plan in accordance with regulation 23 are current.
- (2) A transmission system owner must review its outage and contingency management plan to determine whether it complies with regulation 23 and whether it is able to give effect to the purpose of the regulations -
 - (a) Once every 2 years; or
 - (b) At any time it is directed to do so by the critical contingency operator; or
 - (c) At any time that the relevant transmission system owner is of the opinion that its outage and contingency management plan may not give effect to the purpose of the regulations.
- (3) If, as a result of a review under subclause (2), a transmission system owner considers that the outage and contingency management plan may not:
 - (a) adequately comply with regulation 23; or
 - (b) give effect to the purpose of the regulations;the transmission system owner must notify the critical contingency operator within 10 business days of making such a determination.
- (4) If notice is given under subclause (3) the relevant transmission system owner must:
 - (a) prepare a proposed amendment to the outage and contingency management plan which it considers would better provide compliance with regulation 23 and achieve the purpose of the regulations; and
 - (b) consult on the proposed amendment in accordance with regulation 24, except where the transmission system owner and the critical contingency operator agree that the proposed amendment is immaterial; and
 - (c) submit, after consultation in accordance subclause (b), the proposed amendment to the industry body for approval in accordance with regulations 25, 26, 27 and 28.

32 Testing outage and contingency management plans

- (1) The critical contingency operator must, after consultation with transmission system owners, instigate exercises to test that –
 - (a) The outage and contingency management plans complies with regulation 23 and gives effect to the purpose of the regulations; and

- (b) The contact details included in outage and contingency management plans in accordance with regulation 23 are current; and
 - (c) The list of emergency contact details maintained by retailers in accordance with regulation 40 is current.
- (2) Transmission system owners must participate in tests instigated under subclause (1).
 - (3) Participation in a national civil defence emergency management training exercise under the Civil Defence Emergency Management Act 2002 is deemed to be a test for the purposes of this regulation.
 - (4) An exercise must be instigated by the critical contingency operator at least once every 12 months, except where there has been a critical contingency within that 12 month period and the report produced in accordance with regulation 60 confirms that the outage and contingency management plans meets the test criteria in subclause (1).
 - (5) Within 10 business days of completing an exercise under subclause (1), a transmission system owner must provide a report to the critical contingency operator which –
 - (a) Explains why or why not its outage and contingency management plan meets the test criteria in subclause (1); and
 - (b) Identifies areas in which its outage and 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 outage and contingency management plan; and
 - (d) Contains such other information 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 outage and contingency management plan which it considers would better achieve the purpose of the regulations; and
 - (b) consult on the proposed amendment in accordance with regulation 24, except where the transmission system owner and the critical contingency operator agree that the proposed amendment is immaterial; and
 - (c) submit, after consultation in accordance subclause (b), the proposed amendment to the industry body for approval in accordance with regulations 25, 26, 27 and 28 .

Guidelines

33 Contingency imbalance guidelines

- (1) On the commencement date, the industry body must make and publish contingency imbalance guidelines.
- (2) The objectives of the contingency imbalance guidelines are to –
 - (a) ensure the gas consumed during a critical contingency and any resulting contingency imbalances are accurately determined and allocated to affected interconnected parties, retailers and shippers; and
 - (b) ensure fair, effective and transparent arrangements are set out in the outage and contingency management plans for the determination, allocation and payment of contingency imbalances between affected transmission system owners, interconnected parties, retailers and shippers; and
 - (c) assist compliance with the matters set out in regulation 67(3).
- (3) The contingency guidelines may specify:
 - (a) Procedures for the determination, allocation and payment of any contingency imbalances for interconnected parties, retailers and shippers affected by a critical contingency over the period of the critical contingency; and
 - (b) Other contingency imbalance arrangements considered by the industry body to further the objectives set out in subclause (2).
- (4) The industry body, after consulting with persons considered representative of the interests of persons likely to be substantially affected, may amend the contingency imbalance guidelines and the industry body must publish any such amendments as soon as practicable,

Communications plan

34 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.

Information guide

35 Information guide for certain parties

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

- (1) The electricity system operator; and
- (2) The director of civil defence emergency management; and
- (3) Operators of gas storage facilities; and
- (4) Operators of upstream gas production facilities; and
- (5) The industry body; and
- (6) The Minister of Energy; and
- (7) Any other person that the critical contingency operator considers necessary.

36 Process for preparing information guide

- (1) Prior to 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 subclause (1)(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 50 business days of the commencement date.

- (3) If submissions made on the information guide are also relevant to the outage and contingency management plans or communications plan, the critical contingency operator may consider those submissions when reviewing the outage and contingency management plans or preparing 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.

Consumer information

37 Retailers to provide consumer information

- (1) Retailers must provide a notice to the critical contingency operator no later than 20 business days after the commencement date containing the number and aggregate total annual consumption of the retailer's consumers which are supplied gas through each gas gate that are –
 - (a) In each of the curtailment bands set out in the curtailment arrangements; and
 - (b) Designated as essential service providers; and
 - (c) Designated as minimal load consumers.
- (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 for the information provided in accordance with subclause (1).

38 Critical contingency operator to hold record of retailers' information

- (1) The critical contingency operator must keep a record of information provided to it by retailers in accordance with regulation 37.
- (2) If the critical contingency operator considers that information provided by any retailer is materially incorrect the critical contingency operator must, as soon as reasonably practicable, give notice to the industry body that a specific retailer's information may be materially incorrect and provide all of that retailer's information to the industry body.

39 Audit of retailers' information

- (1) If the industry body is notified by the critical contingency operator pursuant to regulation 38 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 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 is to be conducted in accordance with regulation 73.

40 Emergency contact details

- (1) Retailers must maintain a list of the emergency contact details of all of their consumers with gas consumption in excess of 2 terajoules per annum.
- (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 5 business days of that consumer concluding a switch of retailers.

41 Designation of customers as essential service providers

- (1) The purpose of this regulation is to identify consumers which are essential service providers.
- (2) Each retailer must, as soon as reasonably practicable after the commencement date, notify those of its consumers who are not domestic consumers, that if they wish to be classified as essential service providers they must apply to the retailer in writing and that such an application can be made at any time.
- (3) A retailer must approve a consumer's application to be an essential service provider if all of the following criteria are met -
 - (a) The consumer provide services which are considered necessary to further the emergency response objectives set out in section 59 of the National Civil Defence Emergency Management Plan Order 2005 ; and
 - (b) The consumer can demonstrate that its annual gas consumption was greater than 2 terajoules in any 12 month period within 2 years before the consumer's application; and
 - (c) The consumer meets the criteria in any essential service provider guidelines that may be published by the industry body from time to time.
- (4) Retailers must, within 10 business days of receiving a consumer's application to be an essential service provider, give notice to the consumer that it approves or declines that consumer's application.
- (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 may give notice requiring the consumer to re-apply under this regulation for approval as an essential service provider. To avoid doubt, a consumer remains an essential service provider unless

it receives notice under subclause (4) that the retailer has declined its re-application.

42 Designation of customers as minimal load consumers

- (1) The purpose of this regulation 42 is to identify consumers which require a minimal amount of gas during a critical contingency in order to avoid serious damage to plant and/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 those of its consumers who are not domestic consumers that if they wish to be classified as minimal load consumers they must apply to the retailer in writing and that such an 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; and.
- (4) A retailer must, within 10 business days of receiving an application to be a minimal load consumer, provide notice to the consumer that it approves or declines that consumer's application.
- (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 considered 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 installation has annual gas consumption of greater than 10 terajoules in any 12 month period.
- (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 the plant or the environment; and
 - (b) the period of time for which it requires a gas supply to effect an orderly 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 may give notice requiring the consumer to re-apply under this regulation for approval as a minimal load consumer. To avoid doubt, a consumer remains a minimal load consumer unless it receives notice under subclause (4) that the retailer has declined its re-application.

Part 3

Critical contingency

General

43 Life and limb

No person is required to comply with a provision of this Part 3 to the extent that compliance would unreasonably endanger the life or safety of that person or any other person.

Declaring a critical contingency

44 Critical contingency operator must determine a critical contingency

The critical contingency operator must make a determination that there is a critical contingency if either –

- (a) One or more of the thresholds included in an outage and contingency management plan pursuant to regulation 23(1)(a) is breached; or
- (b) The critical contingency operator has a reasonable expectation that a breach of one or more of the thresholds included in an outage and contingency management plan pursuant to regulation 23(1)(a) is imminent.

45 Process for declaration

- (1) If the critical contingency operator determines that there is a critical contingency under regulation 44, 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 reasonably possible after determining a critical contingency, give formal notice to all affected transmission system owners:
 - (a) Advising them that a critical contingency has been declared; and
 - (b) Detailing the pipeline areas 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.

46 Authority of critical contingency operator

If the critical contingency operator declares a critical contingency, the critical contingency operator must –

- (a) Issue directions to the transmission system owners in accordance with the relevant outage and contingency management plans and the communications plan as closely as practicable having regard to the nature of the critical contingency; and
- (b) Take any other mitigating action it considers necessary to meet the purpose of the regulations if the actions required to mitigate the severity of the critical contingency lie outside the scope of the outage and contingency management plans.

47 Notification of a critical contingency to certain parties

As soon as reasonably practicable after declaring a critical contingency, the critical contingency operator must give formal 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.

48 Publish declaration of critical contingency

The critical contingency operator must as soon as reasonable 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 or its replacement interactive software system, if any.

During a critical contingency

49 Role of critical contingency operator during a critical contingency

- (1) For the duration of a critical contingency, the critical contingency operator must –
- (a) Monitor the linepack levels and pressure 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) Maximise all available opportunities to increase upstream gas production and draw on gas storage, excluding any gas stored in a transmission system or distribution system; and
 - (d) Without limiting the critical contingency operator's power under regulation 46(b), give formal notices to transmission system owners in accordance with the communications plan directing the transmission system owners to -
 - (i) Implement curtailment of demand in accordance with the outage and contingency management plan; and
 - (ii) Revise curtailment of demand in accordance with the outage and contingency management plan;for the purpose of stabilising the linepack and pressure in the section or sections of the transmission system affected; and
 - (e) Once linepack and pressure 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 formal notice to transmission system owners in accordance with the communications plan directing the transmission system owners to either –
 - (i) Restore gas supply to consumers in the reverse curtailment order (last to curtail and first to restore) in accordance with the outage and contingency management plan unless agreed otherwise with the transmission system owner; or
 - (ii) If there is a civil defence emergency, restore 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 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 47; 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 formal notices given by the critical contingency operator.
- (2) To avoid doubt, the critical contingency operator has the power to direct curtailment of only a subset of load within a curtailment band including:
- (a) subsets for voltage support load; and
 - (b) subsets for electricity system stability; and
 - (c) subsets of geographical load.

50 Role of transmission system owner during a critical contingency

If the critical contingency operator determines that there is a critical contingency under regulation 44, transmission system owners must –

- (a) Comply with any and all directions of the critical contingency operator given under these regulations; and
- (b) Subject to subclause (a):
 - (i) follow the outage and contingency management plan as closely as practicable, having regard to the nature of the critical contingency; and
 - (ii) issue directions to retailers in accordance with the outage and contingency management plan: and
- (c) Follow the communications plan.

51 Retailers must follow directions

- (1) Retailers must, as soon as practicable, comply with any and all directions of a transmission system owner issued in accordance with these regulations during a critical contingency.
- (2) Retailers must provide a transmission system owner with regular updates of –
- (a) The retailer'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.

52 Retailers to instruct consumers

- (1) As soon as reasonably practicable after receiving a direction from a transmission system owner under regulation 51(1), retailers must give formal notice to their consumers affected by that direction that the consumer is to curtail demand in accordance with the direction.
- (2) The formal notice given under subclause (1) must include statements that:
 - (a) A critical contingency has been declared by the critical contingency operator; and
 - (b) The critical contingency operator has issued a direction for the curtailment bands, that the notified customers falls within; andeither -
 - (c) The consumer must curtail all its demand; or
 - (d) If the consumer is a minimal load consumer, gas demand must be curtailed in accordance with the agreement with the retailer under regulation 42(6).

53 Consumers to comply with directions

- (1) Subject to subclause (2), consumers must comply with any and all directions issued by their retailer under regulation 52 as soon as reasonably practicable.
- (2) Subclause (1) does not apply to domestic consumers.

54 Continuing critical contingency

- (1) Where a critical contingency has not been terminated under regulation 55 within 3 days from the date the critical contingency was declared under regulation 45, the critical contingency operator must give formal notice of that situation to the industry body, the director of civil defence emergency management and the Minister of Energy.
- (2) On receiving formal notice under subclause (1), the industry body, the director of civil defence emergency management or Minister of Energy may require the critical contingency operator to provide any information it holds concerning the critical contingency.

Termination of a critical contingency

55 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 prior to the event that triggered the critical contingency.

- (2) To avoid doubt, the critical contingency operator may make a determination to terminate a critical contingency under regulation 55(1) before gas supply has been restored to all consumers.

56 Process for termination

As soon as reasonably practicable after making a determination to terminate a critical contingency under regulation 55, the critical contingency operator must give formal 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 formal notice to all affected retailers that the critical contingency has terminated and direct retailers to advise their consumers that the critical contingency has terminated; and
- (c) That they must give formal notice to all consumers connected directly to their transmission system that the critical contingency has terminated.

57 Notification of termination to certain parties

As soon as reasonably practicable after terminating a critical contingency the critical contingency operator must give formal 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; and
- (c) Operators of gas storage facilities; and
- (d) Operators of upstream gas production facilities; and
- (e) The industry body.

58 Publish termination of critical contingency

The critical contingency operator must, as soon as reasonably practicable after terminating a critical contingency, publish a statement that the critical contingency has been terminated.

Part 4

Obligations post critical contingency

Reporting requirements

59 Incident report

As soon as reasonably practicable, but no later than 5 business days after terminating a critical contingency under regulation 55, the critical contingency operator must, in consultation with the affected transmission system owners, prepare and publish an incident report which 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 retailers and consumers general compliance with the instructions of the transmission system owners during the critical contingency; and
- (e) Any other matters that the critical contingency operator considers are appropriate.

60 Performance report

(1) No later than 15 business days after terminating a critical contingency under regulation 55, or as otherwise agreed between the critical contingency operator and the industry body, the critical contingency operator must prepare and publish a performance report which –

- (a) Assesses the critical contingency operator's and transmission system owners' compliance with the regulations, outage and contingency management plan and communications plan; and
- (b) Assesses the extent to which it considers the regulations, outage and contingency management plan and communications plan achieve the purpose of the regulations; and
- (c) Identifies, where applicable, any amendments to the regulations, outage and contingency management plan and communications plan which it considers would better achieve the purpose of the 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 the outage and contingency management plan pursuant to subclause (1)(c), the transmission system owner must –

- (a) prepare a proposed amendment to the outage and contingency management plan which is consistent with the amendment identified in the performance report; and

- (b) consult on the proposed amendment in accordance with regulation 24, except where the transmission system owner and the critical contingency operator agree that the proposed amendment is immaterial.
 - (c) submit the proposed amendment to the industry body for approval in accordance with regulations 25, 26, 27 and 28.
- (4) If the performance report identifies an amendment to the communications plan pursuant to subclause (1)(c), the critical contingency operator must amend and publish a revised communications plan in accordance with regulation 34.

61 Assist with report

A transmission system owner must provide any information and assistance requested by the critical contingency operator for the purpose of preparing the reports under regulations 59 and 60.

Critical contingency price for contingency imbalances

62 Purpose of applying critical contingency price to contingency imbalances

The purpose of regulations 63 to 66 is to determine a critical contingency price to be applied to interconnected parties', retailers' and shippers' contingency imbalances sustained during a critical contingency to –

- (a) Avoid shippers instructing their suppliers 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 prior to 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 repercussions of a critical contingency.

63 Nominate industry expert

- (1) Each transmission system owner, interconnected party, retailer and shipper who will be affected by the determination of a critical contingency price may nominate one person to be considered by the industry body when appointing an independent industry expert to determine the critical contingency price.
- (2) An affected transmission system owner, interconnected party, retailer or 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.

64 Appoint industry expert

- (1) Subject to subclauses (2) and (3), the industry body must appoint an industry expert to determine the critical contingency price from the persons nominated under regulation 63 within 10 business days of the termination of a critical contingency.
- (2) The industry body must only appoint a person nominated under regulation 63 if the industry body considers that such a nominee would be an independent industry expert.
- (3) 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 63.
- (4) The industry body must publish the appointment of the industry expert within 2 business days of making such an appointment.
- (5) Both:
 - (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;are final and binding on all affected transmission system owners, interconnected parties, retailers and shippers.

65 Terms of appointment of industry expert

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

66 Determining the critical contingency price

- (1) The industry expert must determine the critical contingency price in dollars per gigajoule.
- (2) In making the determination under subclause (1), the industry expert must:
 - (a) 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; and
 - (b) 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)(a).
- (3) Where a gas-fired electricity generator plant, which is connected to the electricity transmission system, was the marginal plant on the curtailment band curtailed during the critical contingency, the industry expert should base its determination under this regulation on the prices in the wholesale market for electricity during a critical contingency, except where that would be contrary to subclause (2)(a).
- (4) No later than 20 business days after being appointed under regulation 64(1), the industry expert must give notice of the critical contingency price to affected transmission system owners, interconnected parties, retailers, shippers and the industry body.

Determining and resolving contingency imbalances

67 Determining contingency imbalances

- (1) Within 20 business days of the end of the month in which the critical contingency was terminated, the transmission system owner must determine the contingency imbalances for each interconnected party, retailer and shipper affected by the critical contingency 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 the imbalance for an interconnected party, retailer or shipper created where its consumers in aggregate have, or are deemed under any industry allocation rules to have, consumed more gas during a critical contingency than the total of that interconnected party's, retailer's or shipper's injections into the transmission system determined in accordance with this regulation; and
 - (b) a positive contingency imbalance means the imbalance for a retailer or shipper created where its consumers in aggregate have, or are deemed under any industry allocation rules, to have consumed less gas during a critical contingency than the total of that retailer's or shipper's injections into the transmission system determined in accordance with this regulation.
- (3) When determining a contingency imbalance for each affected interconnected party, retailer and shipper affected by the critical contingency, the transmission system owner must –
 - (a) Act in accordance with its outage and contingency management plan; and

- (b) Use the best information available that is in its possession or can be obtained without unreasonable difficulty or expense in the 20 business days of the end of the month in 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) Adjust quantities consumed having regard to 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) Use the critical contingency price to allocate and invoice any contingency imbalances.

68 Transmission system owners to hold contingency cash pool

- (1) A transmission system owner must receive and hold the payments made in accordance with regulation 69 in a secure and separate bank account in trust for the benefit of interconnected parties, retailers and shippers with positive contingency imbalances.

69 Negative contingency imbalances

- (1) Within 25 business days of the end of the month in which the critical contingency was terminated, a transmission system owner must issue invoices to interconnected parties, retailers and shippers with negative contingency imbalances for the amounts calculated in accordance with regulation 67.
- (2) No later than the 20th day of the month following the month in which the invoice was issued, each interconnected party, retailer and shipper with a negative contingency imbalance determined under regulation 67 must pay the amount stated on the invoice to the transmission system owner

70 Positive contingency imbalances

- (1) Within 25 business days of the end of the month in which the critical contingency was terminated, a transmission system owner must issue invoices to interconnected parties, retailers and shippers with positive contingency imbalances for the amounts calculated in accordance with regulation 67.
- (2) On the last business day of any month during which the payments required under regulation 69 have been received, the transmission system owner must pay the amount calculated in accordance with the

following formula to each interconnected party, retailer and shipper with positive contingency imbalance:

$$R_A = C_p \times (M_A/M_t)$$

Where:

R_A is the amount to be received by interconnected party, retailer or shipper A

C_p is the total amount of money held in the transmission system owner's contingency cash pool at a specified time in relation to the relevant critical contingency

M_A is the positive imbalance of interconnected party, retailer or shipper A in gigajoules

M_t is the total of all the positive imbalances of interconnected parties, retailers and shippers in gigajoules

- (3) Subject to subclause (4), a transmission system owner must make subsequent payments to interconnected parties, retailers and shippers calculated in accordance with subclause (2) so that the amount stated in on the invoice is fully paid out to those interconnected parties, retailers and shippers. .
- (4) A transmission system owner is not required to not pay out an amount greater than the total amount of payments received under regulation 69(2) held in its contingency cash pool at that time.

71 No other imbalance obligations

- (1) A transmission system owner, interconnected party, retailer or shipper shall not be required by MPOC or any other transmission system code to make any payment in relation to a contingency imbalance to the extent that a payment for that contingency imbalance is required and has been paid in accordance with these regulations.

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

- (1) In this regulation, a regional critical contingency means a critical contingency where the effects of the critical contingency were restricted to only a region of New Zealand.
- (2) Regulations 62 to 71 do not apply to a regional critical contingency.

Part 5

Miscellaneous provisions

73 Audits

- (1) In appointing an auditor to conduct an audit of a retailer under regulation 39, 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 one 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. Such a request must be reasonable and strictly for the purposes of the audit.
- (5) In providing information to the auditor, the retailer or the industry body may indicate to the auditor that such information is considered to be confidential.
- (6) The auditor must prepare a written audit report and, within the timeframe agreed with the industry body, give that audit report to both the industry body and the retailer audited
- (7) The audit report may be used -
 - (a) For the purposes of any functions or processes set out in these regulations, the Gas (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 37.
- (8) The retailer being audited must pay the costs of the audit.
- (9) 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.

74 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, prior to 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.

Schedule

Curtailment arrangements

r4, r 23, r 37 and r 49

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 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

An outage and contingency management plan must provide that 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.

Curtailment Band	Consumption (TJ/annum unless specified)	Description
0		Gas offtaken for injection into gas storage.
1a	>15TJ/day	Consumers supplied directly from a 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 a transmission system that do not have an alternative fuel capability. If minimal load consumer then manage wind-down of plant.
2	>10TJ/annum	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 who are not domestic consumers.

3 Restoration of supply

An outage and contingency management plan must provide either:

- (a) that the restoration of gas supply during a critical contingency is to occur in reverse order (last curtailed and first restored) to the curtailment bands specified above; or
- (b) the specific circumstances when the restoration of gas supply during a critical contingency is to occur in a different order than that set out in subclause (a).

4 Other curtailment arrangements

- (a) The industry body may give notice to a transmission system owner specifying other curtailment arrangements provided those arrangements are considered by the industry body to further the objectives set out in this Schedule.
- (b) The industry body must publish any notice given under this Schedule,
- (c) An outage and contingency management plan must provide for the other curtailment arrangements specified in the notice given under this Schedule.