



# Gas Outage and Contingency Management Arrangements – Supplementary Submissions Analysis

March 2008





## **About the Gas Industry Co.**

The 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 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

## Introduction

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### 1.1 Background

1. 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.
2. It is commonly recognised that the NGOCP is no longer appropriate and that it does not provide the degree of certainty that is necessary to cope with a gas security contingency<sup>1</sup>.
3. Gas Industry Co was asked to assist the industry participants to develop a more appropriate set of arrangements that would also address the deficiencies identified with the current arrangements.
4. 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 those commercial mechanisms fail to arrest a decline in linepack that the proposed arrangements would be triggered to direct curtailment of demand so as to balance injections and offtakes.
5. 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. That process identified the key issues that need 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. voluntary compliance is not sufficient).

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<sup>1</sup> See for example section 5 of “Statement of Proposal – Gas Outage and Contingency Management Arrangements” available on the Gas Industry Co website: [www.gasindustry.co.nz](http://www.gasindustry.co.nz)

## 1.2 The proposal

6. Gas Industry Co concluded that the only practicable means of making outage and contingency management arrangements mandatory, and to remove doubt about compliance with the arrangements during a contingency, is to implement them within a framework of regulations (and/or rules) under the Gas Act.
7. Gas Industry Co developed a proposal based on Outage and Contingency Management Regulations (OCMRs). The approach combines the application of regulations with a requirement for industry participants to develop much of the detailed planning and arrangements to apply during a gas contingency. Thus the proposal represents somewhat of a hybrid between a fully regulated set of arrangements and a pan-industry agreement.
8. The OCMRs will set out the roles and responsibilities of participants; define powers to direct certain actions during a gas contingency; and require the Transmission System Owners (TSO) to develop Outage and Contingency Management Plans (OCMPs). The OCMPs will be developed by the TSOs in consultation with stakeholders.
9. Gas Industry Co also hosted a workshop on gas contingency arrangements, and held meetings with a number of industry participants. Feedback from these sessions was incorporated in the policy design process.
10. In August 2007 the proposed arrangements were published in the Statement of Proposal for Gas Outage and Contingency Management Arrangements and released for consultation with industry participants and other stakeholders.
11. In October 2007 Gas Industry Co published a Submissions Analysis paper<sup>2</sup> 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.
12. 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.
13. Gas Industry Co considered that the preferred approach described in its Statement of Proposal of August 2007, as modified by the proposals contained in the supplementary paper, was sound and remained the best option to achieve the regulatory objective.

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<sup>2</sup> “Gas Outage and Contingency Management Arrangements – Submissions Analysis and Next Steps”, October 2007 available on the Gas Industry Co website.

14. A number of detailed comments on aspects of the arrangements were also received. Following analysis of the submissions received, Gas Industry Co recommended changes in the following areas:
- terminology to be used;
  - imbalance calculations;
  - contingency pricing;
  - cost recovery;
  - information provision; and
  - avoiding deadlock in preparation of OCMPs.
15. An industry workshop was held on 27 November 2007 which was attended by 16 industry participants. The purpose of the workshop was to present the refinements Gas Industry Co had developed in response to the submissions.
16. In December 2007 Gas Industry Co published a Supplementary Consultation Paper<sup>3</sup> which presented the refinements on the issues presented at the workshop and also included four additional points that had arisen through discussions with the wider industry and/or Ministry of Economic Development (MED) since the October 2007 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.
17. This paper provides an analysis of the submissions in response to questions included in the Supplementary Consultation Paper of December 2007.

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<sup>3</sup> "Gas Outage and Contingency Management Arrangements – Supplementary Consultation Paper", December 2007

### 1.3 Structure of this paper

Section		Contents
2.	Overview of submissions	<ul style="list-style-type: none"> <li>• Submissions received from eight submitters</li> </ul>
3.	Issues raised	<ul style="list-style-type: none"> <li>• Avoiding deadlock in preparation of OCMP</li> <li>• Critical Contingency thresholds – in OCMPs or regulations?</li> <li>• Curtailment</li> <li>• Determination of contingency imbalances</li> <li>• Critical Contingency price</li> <li>• Cost recovery</li> <li>• Compliance</li> <li>• Other significant issues</li> <li>• Terminology</li> </ul>
4.	Next steps	<ul style="list-style-type: none"> <li>• Industry implementation group</li> <li>• CCO service provider agreement</li> </ul>

# 2

## Submissions received

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### 2.1 List of submitters

18. Submissions on the December 2007 Supplementary Consultation Paper were received from eight submitters. The submitters are listed in Table 1 and grouped according to their involvement in the supply chain.

**Table 1 Summary of submitters**

<b>Retailers/Shippers and/or Generators</b>	<b>Transporters</b>	<b>Consumers</b>
<ul style="list-style-type: none"><li>• Contact Energy (Contact)</li><li>• Genesis Energy (Genesis)</li><li>• Mighty River Power Ltd (MRP)</li><li>• Nova Gas Ltd (Nova)</li><li>• Wanganui Gas Ltd – Energy Direct NZ (EDNZ)</li></ul>	<ul style="list-style-type: none"><li>• Maui Development Ltd (MDL)</li><li>• Vector Ltd (Vector)</li></ul>	<ul style="list-style-type: none"><li>• Methanex New Zealand Ltd (Methanex)</li></ul>

19. Gas Industry Co thanks those involved in compiling these submissions.

### 2.2 Focus of submissions

20. Typically the submissions focused on issues of implementation and/or details of the draft regulations. This suggests that there is a broad recognition of the need for intervention in the narrow circumstances which the draft regulations propose to address.
21. In addition, it is also generally recognised that the broader issues of security of supply more properly rest with the industry itself and, to some extent, with generic open access issues.

# 3

## Issues raised

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22. This section describes the points raised in submissions in response to the questions posed in section 5 of the Supplementary Consultation Paper.
23. The issues are grouped under the same headings used in the Supplementary Paper. This paper describes what was said in the Supplementary Paper, what the industry submissions said and gives the Gas Industry Co response to the issues raised.

### 3.1 Avoiding deadlock in preparation of OCMPs

#### What was said in the Supplementary Paper

24. The way the draft regulations are structured means that the new arrangements cannot work effectively until a set of approved plans are in place. For this reason there appeared to be merit in adding a 'deadlock breaker' in the situation that either (or both) of the initial OCMPs has not been approved within a reasonable length of time.
25. Gas Industry Co proposed to change the arrangements to allow for a period of six months from the commencement date for OCMPs prepared by TSOs to be approved. The period of six months should provide sufficient opportunity for the TSO to review and amend its proposed OCMP. On expiry of that six-month period, Gas Industry Co would have the option, itself, to amend the plan and then approve that amended plan.

#### What the submissions said

26. There was unanimous support from submitters that there should be a deadlock breaker provision exercised by Gas Industry Co after a period of six months to ensure the application of the regulations is not frustrated by any delay in getting the first OCMPs in place.
27. Contact proposed the deadlock breaker should be available not only for the original OCMPs but also for subsequent changes to the OCMPs. Vector noted that there is potential for a

deadlock situation to arise at various stages of agreeing the OCMPs, for example when consulting on the imbalance guidelines.

28. MDL pointed out that the maximum times allowable under the regulations meant there would be only one opportunity for the TSOs to resubmit their OCMP for approval within the six-month period prior to the deadlock breaker. MDL wished to shorten the times allowable so that there would be opportunity for two resubmissions.
29. Contact wanted Gas Industry Co to consult with the industry on the contents of the OCMPs.

### **Gas Industry Co response**

30. Gas Industry Co included the deadlock breaker as a way to ensure that the initial OCMPs get approved and put in place without undue delay. The proposed arrangements involve the various parties working together during the approvals process and Gas Industry Co expects this will mean the OCMPs can be approved within six months. Gas Industry Co saw the need to have a deadlock breaker provision for the first set of plans. However, when considering subsequent revisions to the OCMPs, the pre-existing, and approved OCMP remains in effect up until the revised plan has been approved. Gas Industry Co does not see the need for a deadlock breaker after the first set of OCMPs has been approved.
31. There are a number of other parts to the new arrangements that are to be developed prior to the commencement date. It is Gas Industry Co's intention to form an industry implementation group to coordinate the preparation work for the new arrangements, ensure parties are aware of their obligations and invite industry input for certain aspects of the preparations.
32. The work of the industry implementation group could begin in the second quarter of calendar 2008 allowing at least six months before the commencement date.
33. The purpose of such an industry group would be to identify any 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). It is Gas Industry Co's intention that the work covered by the industry group will include:
  - assisting Gas Industry Co with the development of the critical contingency threshold upper and lower limits for inclusion in the regulations (see section 3.2 below);
  - TSOs presenting the draft contents of their OCMPs to this group ahead of the commencement date. Thereby allowing for industry to provide input to the OCMPs; and

- developing arrangements regarding the processes relating to contingency imbalances with input from the implementation group<sup>4</sup>.

## 3.2 Critical Contingency thresholds—in OCMPs or regulations?

### What was said in the Supplementary Paper

34. The proposed arrangements provided for the OCMPs to specify the minimum pressure and linepack thresholds which will trigger a Critical Contingency. The TSOs, as the persons with the necessary expertise and understanding of their respective pipelines, will propose the various pressure and linepack thresholds. The main value of having the thresholds contained in the OCMPs is that it allows the thresholds to be adapted to and amended in sufficient time to address a change in pipeline circumstances or industry dynamics. 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.
35. Some concerns have been raised with Gas Industry Co as to the *vires* of the existing proposal. The concern relates to the application of the outage arrangements being prescribed outside the regulations. The thresholds trigger declaration of a critical contingency and when the CCO may direct curtailment under the regulations. The alternative approach is to set the minimum pressure and linepack thresholds in the regulations themselves. Such an approach would, in essence, follow the same form as setting the trigger levels in the OCMPs. That is, TSOs would provide the trigger levels, Gas Industry Co would seek technical advice, stakeholders would be consulted on the trigger levels, submissions would be analysed and a recommendation made. The procedure differs at the last step (where the levels set in the regulations are changed) where the Minister of Energy either accepts or rejects the recommended change.
36. Gas Industry Co considered the breach of a predefined trigger level to be fundamental to identifying when a critical contingency is triggered. There needs to be an objective test and the CCO should only declare a critical contingency when either the trigger level has been breached or where a breach of it is imminent.

### What the submissions said

37. Submitters all supported arrangements that have the linepack and pressure thresholds prescribed in the OCMPs rather than having the threshold in the regulations. Vector stated

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<sup>4</sup> Note that these will not be guidelines as had been indicated in the draft regulations. The draft regulations will be revised to remove reference to guidelines.

that the advantage of having the thresholds set in the plans is that it would enable them to evolve in response to system and behavioural changes over time.

38. EDNZ said that the Gas Industry Co should have a watching brief over this part of the plan, while MRP stated that Gas Industry Co should monitor approaches taken and determine whether regulation should be considered in future. Genesis stated that Gas Industry Co should initiate amendments to threshold levels and, if possible, provide greater clarity in the regulations about how severe an event should be before a critical contingency is triggered. Contact expressed the view that the thresholds should be specified as part of OCMP content guidelines produced in consultation with the industry.
39. Vector stated that the trigger should be broadened and, in addition to the pressure and linepack thresholds, include either:
- “any other situation where the CCO must act to maintain the safe operation of the gas transmission system”; or
  - a list of prescribed thresholds (causes).

### **Gas Industry Co response**

40. Gas Industry Co considers that the proposed approach of having the thresholds specified by the TSO in the OCMP, and having the OCMP open to consultation will provide the necessary checks and balances (from other industry participants, the expert adviser and Gas Industry Co). The setting of the threshold levels is a trade-off between providing sufficient inventory to adequately buffer supply shortages and needlessly holding back quantities of gas in reserve. The ‘right’ level for the threshold will be a matter for determination by TSOs in the light of customer views, expectations for volumes of gas to be transported, and the interplay between the physical characteristics of the pipeline, compressor capabilities, and the cost of gas stored in the pipeline. The threshold levels may vary across the transmission networks, and vary over time (for example if there were a change in pipeline operating pressure or in response to different levels of throughput).
41. Gas Industry Co favours retention of a narrow scope of power with the trigger specified in terms of a measurable effect, rather than as a list of possible causes. It appears that the scenarios raised by Vector can all be managed through other processes e.g. if an event stemmed from the injection of non-specification gas this should be handled under the existing codes and a critical contingency would only be triggered under an OCMP if it arose as a consequence of managing the non-specification gas incident.
42. With regard to the concern about setting the thresholds outside the regulations in the OCMPs, Gas Industry Co has examined this issue further with MED and its legal advisers. Those

discussions identified that delegating that function to TSOs (subject to the relevant consultation, review and approval processes) outside the regulations could be viewed as an illegal sub-delegation – given the critical role of the thresholds in terms of the application of the regulations.

43. Gas Industry Co considers there to be two feasible approaches to mitigate this concern while still providing for effective management of a critical contingency.
- The first option would be to retain the current process for the development of thresholds in the OCMPs but to also specify upper and lower bounds of the linepack and pressure level thresholds in the regulations. TSOs would be required to propose trigger levels in their OCMPs which lay between those upper and lower bounds. Thus, prior to recommending the regulations to the Minister, it would be necessary to determine those upper and lower bounds. Gas Industry Co would engage with industry participants via the industry implementation group to facilitate the development of the upper and lower bounds for the thresholds – for both of the transmission pipelines and for any relevant periods. Gas Industry Co’s initial view is that this option is its preferred approach.
  - The second option would be to set initial thresholds for a short transitional period in the regulations but provide for rules to be made under the Gas Act which would actually set the thresholds that the OCMPs must comply with. The transitional initial thresholds would only be in effect long enough for rules to be made – and the rules setting the thresholds would obviously be developed following appropriate industry engagement. Rule changes to the thresholds could be made over time, if necessary, to allow for those thresholds to be revised to reflect changes in pipeline throughput and/or the level of linepack required for the effective management of a critical contingency. Although not quite as responsive in timing terms as allowing the OCMPs to set those thresholds, Gas Industry Co consider this approach as preferable to firmly setting the thresholds in the regulations.
44. Gas Industry Co will pursue the first option provided it meets with approval from MED and PCO.

### **3.3 Curtailment**

#### **What was said in the Supplementary Paper**

45. Gas Industry Co had 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 who do not purchase gas from a gas wholesaler to comply with the outage arrangements.

46. To mitigate the concern over the application of the arrangements to domestic consumers, Gas Industry Co considered that it was appropriate for the curtailment bands to exclude domestic consumers and also for the regulations to clarify that compliance with any directions to curtail is not required by domestic consumers.
47. Gas Industry Co proposed 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. The intention was 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. The schedule for curtailment arrangements was attached to the draft Regulations in Appendix B of the Supplementary Paper.
48. Gas Industry Co intends to carry out a review of the curtailment arrangements within three years of the commencement date and use the results of the review to assess whether a recommendation for an amendment to the curtailment arrangements in the schedule is desirable.

### **What the submissions said**

49. Several submitters (Concept, Genesis and Vector) agreed that exclusion of domestic consumers from the final curtailment band would have little impact on the effective management of a critical contingency. Novagas and EDNZ stated that in extreme emergencies the CCO should have the right to curtail residential supplies. The point was also made in several submissions that if curtailment of domestic consumers were sought, it would be by requests via the media rather than contacting individual consumers and requiring curtailment. Contact stated that Gas Industry Co should recommend to retailers that they include the right to curtail a consumer in their retail terms and conditions rather than in the regulation where the problem is identified.
50. Contact expressed concern that the CCO will determine which subset of load to curtail. Contact noted that the arrangements do not state that the CCO would seek advice from Transpower when determining which gas fired power stations to switch off.
51. Genesis suggested that the curtailment bands should not differentiate consumers with alternative fuel capabilities.
52. Genesis also suggested that the regulations should require Gas Industry Co to consult before changing the curtailment bands. Methanex could not see the need for Gas Industry Co to make changes to the curtailment arrangements.

53. MDL stated that in its view there should be greater flexibility in the operation of curtailment bands with the CCO and TSOs given discretion as to how best to curtail and restore supplies.

### **Gas Industry Co response**

54. Gas Industry Co considers that exclusion of domestic consumers from the curtailment bands will not have a material impact on the management of critical contingencies in most instances. Domestic consumers are contained in the final band of the curtailment schedule and would only have been required to curtail after all larger, non-domestic consumers had been directed to curtail. Gas Industry Co agrees with industry responses that suggest in a critical contingency it might be appropriate to broadcast an appeal via the media to domestic consumers to reduce demand in the event the supply/demand balance is severely compromised.
55. Gas Industry Co notes the comment by Contact about terms and conditions and recommends that retailers include the right to curtail in their retail terms and conditions.
56. The curtailment bands distinguish consumers who have an alternative fuel capability from consumers who are reliant on gas (this can be seen in bands 1a and 1b, and in bands 2 and 3). The reason to curtail consumers with alternative fuel capability first is that, given sufficient notice, these consumers can switch to running on the alternative fuel without interrupting production whereas a consumer who is reliant solely on gas to fuel its plant will have to cease production. The net benefit to the economy is likely to be greater if consumers who can switch to alternative fuel do so first. Should further curtailment be required the consumers who are reliant solely on gas will be required to curtail, but by that stage this step is unavoidable. Balancing this consideration in the design of the curtailment bands is the need for curtailment to make significant cuts to overall demand in order to preserve the remaining linepack. The very largest consumers (>15TJ/day) are in the top two bands and are curtailed first. This slows down the rate at which linepack is depleted and gives more time for the CCO to make alternative arrangements to restore supply, if at all possible, and if necessary implement further curtailment of consumers in the lower bands which will involve greater numbers of consumers, and take more time both to contact them and to implement curtailment.
57. Where it is possible for the CCO to manage a critical contingency through curtailment of a subset of the power generation load in curtailment band 1b, it is intended that the CCO would seek guidance from the Electricity System Operator as to its preference for which generation plant should be curtailed based on maintaining the stability of the electricity supply network.
58. The regulations require the TSO to describe its processes, consistent with the curtailment arrangements, outlining the manner in which curtailment will be implemented. Gas Industry Co considers that the OCMP gives the TSO the scope to describe how best to curtail and restore supply, and provides the information in a way that is transparent and open through consultation with the industry. However, it must be borne in mind that the OCMP is a

procedural document, and it is the CCO who directs when curtailment occurs and which bands are affected.

59. The schedule in the draft regulations contained a provision for Gas Industry Co to issue a notice specifying additional curtailment arrangements. That provision was intended to provide a flexible means of refining the curtailment arrangements in light of experience with prior contingencies. However, given that OCMPs can specify other curtailment arrangements, provided those arrangements are consistent with the regulations, Gas Industry Co now considers that such a provision is unnecessary. As such, that provision will be removed from the draft regulations. Gas Industry Co notes that its intended review of the curtailment arrangements in the schedule within three years of the commencement date will provide an opportunity to revise the curtailment arrangements if considered necessary.
60. Gas Industry Co intends to consult with industry as part of the review of the curtailment arrangements to be carried out within three years of the commencement date. Gas Industry Co is aware of work currently ongoing in the industry looking at the interactions between curtailment of gas fired power generation and the electricity supply industry. Gas Industry Co would expect the results of this work to feed into its review.

### **3.4 Determination of contingency imbalances**

#### **What was said in the Supplementary Paper**

61. 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.
62. 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 considered that this can best be achieved through a set of imbalance guidelines to be developed by Gas Industry Co, and by requiring TSOs to

address these details of the arrangements in their OCMPs. The final detail would then be exposed to industry scrutiny through the consultation process.

63. Gas Industry Co illustrated how an hourly unit of time might be used for calculating imbalances. The purpose of that exercise was to illustrate how the new arrangements might be implemented by the TSOs. Gas Industry Co 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.
64. Gas Industry Co concluded that it was worthwhile to undertake further investigation of what would be involved in carving out a sub-day period for the purpose of calculating contingency imbalances. Submitters were asked if they agreed 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.
65. 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. Accordingly, Gas Industry Co recommended that the regulatory intervention in regional contingencies would not include any arrangements for payments to reflect the rationing arrangements. Submitters were asked if they agreed and, if not, how the payment would work and how efficiency would be improved by the requirement for payments.

### **What the submissions said**

66. Vector stated that arrangements that can reflect sub-day periods are more likely to meet the objectives. MRP stated that a sub-day period should be used and that the feasibility of a sub-day period should be examined further. Nova stated that more work should be completed and pointed to the costs versus the benefits of calculating flows and consumption on an hourly basis. EDNZ stated that although the theory of a sub-day period is sound, there are already substantial difficulties calculating imbalances for a full day let alone a sub-day. Contact stated that further consideration needed to be given to how the start and end point of a contingency is determined, whether sub-day periods are appropriate and how contingency arrangements relate to balancing regimes of pipeline codes.
67. MDL said that consideration should be given to the transition from the normal MPOC arrangements to critical contingency arrangements and back again. Genesis said that there is a need to examine how the critical contingency imbalance regime can integrate with the code-based regimes in MPOC and VTC in a way that is operationally (and legally) seamless and does not create perverse incentives.

68. MDL stated that it did not support the establishment of an industry group to aid development of guidelines, pointing to the need to reach agreement quickly, and pointing to the technical area of determining imbalances.
69. Genesis agreed with Gas Industry Co's recommendation that there be no transfer payments in the case of a regional contingency. Furthermore Genesis suggested that the definition of a regional contingency should be altered so that it pertains only to isolation of a portion of a transmission system from production and storage. Vector and EDNZ agreed with the Gas Industry Co recommendation that transfer payments should not apply in a regional contingency.
70. Contact stated that the compensation mechanism should have application across all kinds of contingencies. MRP stated that there should be compensation in the case of a regional contingency in which only major plant were affected. Nova suggested that it is appropriate for the domestic retailer to provide some recompense to the affected industrial retailers/consumers.

### **Gas Industry Co response**

71. Gas Industry Co identified some of the issues involved in determining contingency imbalances in the supplementary paper. Industry submissions have confirmed that the parameters which need to be set include:
  - determination of the start and end of the critical contingency for measurement purposes;
  - the treatment of changes in linepack during the critical contingency; and
  - the interface with the imbalance arrangements in the MPOC and VTC codes.
72. Gas Industry Co retains an open mind as to whether a day or a sub-day should be used for the purpose of determining contingency imbalances. Further work needs to be carried out on the cost/benefits and, in particular, the feasibility of determining flows on a sub-day period.
73. The current form of the regulations provides for the contingency imbalance guidelines to address the issue of sub-day or otherwise measurement. Gas Industry Co now considers that regulations are able to address this issue at a principled level and with the necessary measurement processes set out in the relevant OCMPs (following the applicable consultation, review and approval processes for OCMPs).
74. The regulations will be amended to specify the time period over which imbalances should be calculated and the contingency imbalance guidelines removed from the regulations. In that regard. Gas Industry Co considers that the regulations should require contingency imbalances to be calculated from the onset of a critical contingency through to its termination, if that is

technically feasible. However, if it proves impossible to calculate contingency imbalances for periods other than whole days then the regulations will require contingency imbalances to be calculated from 0:00 am preceding the onset of the critical contingency through to 24:00 on the day on which the critical contingency is terminated by the CCO.

75. Gas Industry Co recommends that further work is carried out through the proposed industry implementation group to facilitate the development of the measurement processes that are to be included in the OCMPs. The arrangements for the determination of contingency imbalances should then be developed by the TSOs based on the work of the implementation group and the details would be contained in the OCMPs.
76. Gas Industry Co recognises that there is a potential issue around the definition of a regional contingency, and proposes to add a definition to the regulations along the following lines: *“A regional critical contingency means a critical contingency where there is either a restriction to, or loss of, the transmission capacity which supplies that region and the effects of the critical contingency are limited to only a region of New Zealand. In a regional critical contingency the affected region becomes, wholly or partly, isolated from any significant sources of supply and curtailment is the only tool to maintain and manage linepack in the affected region”*.
77. Gas Industry Co is not convinced by the submissions that stated that “compensation” payments should be a feature of regional contingencies. In the first instance, the concept of “compensation” does not feature in the proposed arrangements. The emergency pricing and imbalance arrangements, as proposed, are designed to settle inadvertent trades in the simplest manner, without sacrificing efficiency. In the case of a regional contingency the question of inadvertent trading should not arise. There is no shortage of gas supply, rather there is a constraint on the ability to transport and deliver gas.
78. In the responses there was no clear identification of how compensation payments would improve the efficiency of the arrangements. In such circumstances it is possible that some form of pricing could be used to ration the scarce transmission capacity. However, it is not at all clear what purpose this would serve and neither has Gas Industry Co been able to identify any increase in efficiency that would result. Accordingly Gas Industry Co believes the pricing mechanism should not apply for a regional contingency.

### **3.5 Critical Contingency price**

#### **What was said in the Supplementary Paper**

79. Following responses from submitters to the August 2007 consultation paper, Gas Industry Co proposed that there should be an overarching principle that needs to be achieved in setting the Critical Contingency Price (CCP). Gas Industry Co proposed 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”.*

80. 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.
81. Using prices in the electricity wholesale market to impute a gas price is similar to (but not the same as) the gas price equivalent under MPOC. To illustrate netback pricing from the electricity market, Gas Industry Co presented the gas price equivalent on each day in the year August 2006 to July 2007 based on using prices at Otahuhu node and an assumed electrical conversion efficiency.
82. Gas Industry Co recommended 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 CCP, hold moneys in the critical contingency pool and make payments to shippers with positive imbalances in a similar way to the role of Gas Industry Co in the original draft regulations contained in the earlier Statement of Proposal.

### **What the submissions said**

83. Most submitters (Contact, MDL, Methanex, Nova and Vector) agreed with the proposed overarching principle for setting the critical contingency price. MRP stated that the proposed direction provided to the Industry Expert was too vague. EDNZ said the proposal was too theoretical, represented “financial suicide” for a gas retailer who is not also an electricity generator, and was illogical.
84. MDL, Methanex, Nova and Vector agreed that the independent expert should have regard to a specified list of prices that includes the prices in the electricity market used to impute a gas price, and the economic cost of the loss of gas supply to those consumers who had their supplies curtailed. MRP stated that electricity prices should only be used in the absence of an effective short term gas market.

85. Vector stated that Gas Industry Co should consider the possible implications of instances when the CCP is exceptionally high. EDNZ stated that the cost to EDNZ if the gas price is linked to the electricity spot market is inestimable.
86. Genesis stated that it believes further work is required on pricing and favours an ex-ante approach to pricing rather than ex-post. Genesis also stated that the MPOC daily incentive price could be an appropriate basis for ex-ante price determination.
87. Contact stated in its submission that it believes there are issues with regards to the determination of CCP that have not been satisfactorily resolved to a point where it can be finalised in the regulations. Contact recommended that Gas Industry Co consult with an industry group on contingency pricing issues to develop a set of pricing guidelines (similar to the imbalance guidelines).
88. There was support from submitters that the TSOs should operate a critical contingency cash pool. MDL stated that the draft Regulations contained insufficient detail around the non-payment of invoices and that interest should accrue on invoiced amounts as provided for in the equivalent provisions of the MPOC. Vector stated that it would be unacceptable for TSOs to issue invoices to industry participants who in effect do not owe those funds to the TSO. Vector would be reluctant to operate a critical contingency cash pool, as identified, under any circumstances.

### **Gas Industry Co response**

89. The arrangements for determining the CCP need to be adaptable to future developments and need to apply to a variety of critical contingency situations which may vary in extent of curtailment and in duration.
90. Gas Industry Co considers that the proposed overarching principle (that the CCP be required to reflect the price that would be established by an efficient short-term market) is the correct one and notes that it is well-supported by a number of submitters.
91. Gas Industry Co acknowledges that in setting the criteria used to determine the contingency price a balance needs to be struck between a number of competing objectives. Furthermore, Gas Industry Co notes:
  - the use of a gas wholesale market to set the CCP would be adopted to set the price if one were to develop in NZ;
  - that power generation will be the marginal gas load curtailed in a large number of critical contingencies (generation represents over 50% of annual gas demand), and that a price

based on the electricity wholesale market would reflect the marginal value of gas to an electricity generator under these circumstances;

- the industry expert would be required to determine the appropriate CCP for the period of the critical contingency, using electricity prices and/or the costs of non-supply of gas as a basis. This suggests an averaging of prices which will provide some protection against price spikes from individual half-hours in the electricity wholesale market (in a way the gas price equivalent under MPOC, which is based on the highest two-hour period, does not); and
- where curtailment is deeper than power generation it is envisaged that an economic cost calculation to those consumers who had lost their gas supply will be used to set the CCP. Gas Industry notes the comment made by Genesis that the MPOC daily incentive price could be an appropriate basis for ex-ante price determination and believes that the process for setting the CCP is broadly comparable to this in the situation that gas power generation was the marginal plant curtailed.

92. Submissions received in response to this supplementary consultation paper, and to the August 2007 consultation paper, have both demonstrated that divergent views exist on the criteria that should be used to determine the CCP. Views are split between those who want assurance that the CCP will be sufficiently high to encourage supply/demand curtailment and those who want the price to be low and require protection from the potential for gaming by participants with perceived or actual market power.
93. Gas Industry Co considers that the setting of the CCP should be contained in the regulations and not delegated to an industry group.
94. Gas Industry Co considers that no better alternative to ex-post pricing has been put forward by submitters and that the proposed approach using ex-post price determination is appropriate. Gas Industry Co acknowledges that there is uncertainty about what the value of the CCP will be. However, the regulations restrict the industry expert to:
- using the electricity wholesale market to impute the CCP if gas-fired electricity generation was the marginal gas plant curtailed; or
  - basing the CCP on the economic cost to the marginal consumer curtailed.
95. Gas Industry Co was surprised by Vector's reluctance to operate the critical contingency cash pool which it saw as an administrative activity taking the imbalance volumes calculated by the TSOs and the price as determined by the industry expert and invoicing the cash out of negative imbalances at the CCP, holding moneys in the critical contingency pool and making payments to shippers with positive imbalances. However, Gas Industry Co is able to undertake this function (whether by itself or by engaging a suitable service provider) instead of the TSOs.

96. Gas Industry Co notes the comment made by MDL that interest should accrue on invoiced amounts. A mechanism already exists in the proposed arrangements to address the issue of late payment. Any party who does not pay by the due date will be in breach of the regulations and the compliance arrangements can be used to settle the matter. However, Gas Industry Co acknowledges it may create a greater incentive if the regulations were to provide for a late payment fee for contingency imbalance (as is the case for ongoing fees), particularly if Gas Industry Co is required to undertake the functions related to the critical contingency pool. Gas Industry Co will give this issue, and whether it is required to run the critical contingency pool, further consideration.

### **3.6 Cost recovery**

#### **What was said in the Supplementary Paper**

97. Gas Industry Co looked at ways in which the recovery of the upfront development and establishment costs from the industry could be spread over a number of years rather than recovered as a lump sum at the start of the new arrangements.
98. Gas Industry Co suggested that it request the CCO to spread the up front costs over the duration of the service provider agreement.
99. Gas Industry Co proposed to investigate the feasibility of spreading the cost recovery of its own development costs over a number of years. However the final outcome would be dependent on Gas Industry Co's balance sheet capability.

#### **What the submissions said**

100. Submitters supported the proposal to request the CCO to spread its costs over the duration of the service provider agreement. Vector stated that the CCO should not be compelled to adopt such an approach especially where this may lead to an inappropriate rate of return or there may be a realistic prospect of default by industry participants. Genesis stated that the service provider costs should be funded through the Gas Industry Co's levy-setting power, not through dedicated fees, citing loss of accountability as a primary concern.
101. Submitters supported Gas Industry Co's proposed approach to spreading the development costs. Vector stated that without information on the longer term financial status of Gas Industry Co or financial guarantees available to it the cost should not be spread as proposed.

#### **Gas Industry Co response**

102. Gas Industry Co will request the CCO to spread its costs over the duration of the service provider contract and if a suitable agreement can be reached then it will structure the fees

under the contract in this way. However, to the extent the CCO requires guarantees from Gas Industry Co's shareholders (or some other form of surety) it may not prove possible to do this.

103. Gas Industry Co will seek to spread its own development costs over a number of years if it can find a suitable financing arrangement.
104. Gas Industry Co has adopted dedicated fees, as provided for under the Gas Act, for reasons of efficiency. Dedicated fees allow for user/causer pays in a way that may not always be possible through the structure of the wholesale/retail levy.

## **3.7 Compliance**

### **What was said in the Supplementary Paper**

105. A concern had arisen over whether the proposed Compliance regulations would adequately ensure compliance by participants with instructions to curtail demand during a critical contingency.
106. Gas Industry Co had been considering whether it was now necessary to include powers that could be exercised during a critical contingency to enforce compliance with a direction to curtail demand. Two options were put forward: either to include in the compliance regulations a power for Gas Industry Co to obtain injunctive relief from the High Court; or to provide a fast track mechanism in the compliance regulations to allow the Rulings Panel to make the required orders.

### **What the submissions said**

107. Contact did not think it necessary to include an ability to obtain injunctive relief from the High Court. Contact stated that the concept does not automatically mean a right to an immediate court hearing and therefore may limit the effectiveness of an injunction. Genesis considered the curtailment intervention to be injunctive in nature and offered no opinion whether or not specific provision should be included within regulations. MRP and Vector supported the need to obtain urgent orders where consumers fail to comply with directions to curtail demand. EDNZ stated that consumer compliance is a retailer issue and if consumers fail to comply with curtailment notices then retailers have the option of having the GMS removed and/or cutting service.
108. Contact stated that the threat of applying for an interim injunction may not be the most effective incentive to ensure compliance as there could be a wide range of factors that affect a consumer's ability or willingness to comply. The Rulings Panel could directly manage this factor just as effectively, but might need to impose more substantial fines.

109. Genesis queried whether an order could realistically be obtained in an appropriate timeframe to suit many of the possible contingency scenarios. Vector stated that it will be important for parties to comply with their obligations under the regulations. However, Vector did not believe the Rulings Panel would provide an appropriate mechanism to assist in achieving the desired actions of industry participants in the event of a critical contingency.

### **Gas Industry Co response**

110. Gas Industry Co considers that a failure to curtail demand could have serious consequences for the effective management of a critical contingency. It is important that industry participants are aware of their responsibilities under the regulations. Gas Industry Co proposes that the membership of the industry implementation group include suppliers and retailers (i.e. those parties responsible for communicating directly with the consumer). Gas Industry Co recommends that suppliers and retailers include a provision to curtail a consumer in the event of a critical contingency within their supply agreements. This would be a way of alerting consumers to their obligations as well as making it clear that in certain, rare, circumstances it may be necessary to curtail gas supply.
111. Gas Industry Co acknowledges that, for many critical contingencies, injunctive relief may not provide an effective mechanism to enforce curtailment and contribute to the management of a critical contingency. The time taken to obtain an injunction may be greater than the time available for requiring the consumer to curtail demand, given that most critical contingencies are of relatively short duration. However, in longer term and more serious critical contingencies, Gas Industry Co considers it is likely to be vital to ensure compliance with a direction to curtail. The ability to seek urgent injunctive relief from the High Court is expected to ensure compliance – even if that option should be (as is hoped) rarely needed. More generally, cases of non compliance in a critical contingency will obviously be dealt with by the proposed Gas (Compliance) Regulations, with the potential for the Rulings Panel to impose fines on those who fail to comply with a direction to curtail demand.

## **3.8 Other significant issues**

### **Minimal Load Consumer**

112. Methanex raised the question of whether the current wording of the draft regulations is too high a hurdle to achieve a minimal load classification.
113. The wording in the regulations includes the following test in regulation 42(5)(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.”*

114. Gas Industry Co maintains the view that to achieve the classification of minimal load consumer should involve a demanding test. The only reason Gas Industry Co can see for giving the minimal load consumer the right to continue taking gas, when other consumers in the same band have been curtailed, is to protect against significant damage to plant or the environment.
115. Gas Industry Co envisages that there may be consumers who wish to be classified as minimal load consumers but do not pass the test. Where there is a dispute on classification Gas Industry Co considers the Rulings Panel would be the appropriate party to deal with this issue.

### **Consumer information**

116. Contact states that there is a lack of reliable information available to pipeline operators about the level of reduction in gas offtake achievable through issuing instructions to curtail loads in various bands. Contact suggests each retailer provides a notice with average daily consumption for a summer month and a winter month to the CCO, and information disaggregated by ANZSIC code.
117. Contact is also concerned about the timeframe in which retailers are required to update the emergency contact details of switched consumers and suggested that 40 business days be allowed rather than 5 business days stated. This would allow Contact to identify any new consumers and collate their emergency details as part of the monthly process.
118. The requirement in the regulations is for retailers to provide information on the number and annual volume of consumers in each of the curtailment bands in each of the distribution zones.
119. Gas Industry Co agrees that consumer demand can vary significantly across the year and that the CCO will need to be able to estimate the expected reduction in demand resulting from curtailment of a particular band in a particular distribution zone. However, Gas Industry Co considers the information provided to the CCO on consumers will give the CCO information on which to base an estimate of the effect of curtailment. The CCO would apply a simple set of winter/summer scaling factors to estimate the daily demand of all consumers in a band from the aggregate annual quantity in a band. Gas Industry Co is not convinced of the need to provide these scaling factors for an individual consumer, as the estimate can instead be applied to the aggregate.
120. Gas Industry Co agrees that it would be sensible to change the period given to retailers to update emergency contacts from 5 business days to 40 business days to fit in with existing industry practice.

## Costs incurred by TSO

121. MDL stated in its submission that the TSO should be able to recover the costs incurred in preparing and consulting on OCMPs and in managing the critical contingency cash pool, including calculating contingency imbalances, issuing invoices, and collecting and making payments.
122. Gas Industry Co considers that the activities required of the TSO to ensure the continued safe operation of its pipeline during a critical contingency are part of the operating costs for a transmission system owner. Gas Industry Co would note that the design of the new arrangements has made use of existing industry processes and practices wherever possible to keep the costs down. How the TSO recovers its costs through its tariffs is a matter for the TSO and its customers.

## 3.9 Terminology

123. When developing the Statement of Proposal, Gas Industry Co received suggestions for revision of the terminology used so as to improve conformity with industry conventions. Further changes to terminology were made when preparing the Supplementary Consultation Paper.
124. Genesis, in its most recent submission, has recommended further streamlining the terminology used. Specifically, Genesis suggests substituting "outage and contingency" with "critical contingency" throughout.
125. Gas Industry Co agrees with this suggestion and intends to adopt the change whilst finalising the proposed regulations. There will be relatively few terms that need to change, two examples of which are as follows.

Existing term	New term
Gas (Outage and Contingency Management) Regulations	Gas (Critical Contingency Management) Regulations
Outage and Contingency Management Plans (OCMP)	Critical Contingency Management Plans (CCMP)

# 4

## Next steps

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### 4.1 Industry Implementation Group

126. Gas Industry Co proposes to establish an industry implementation group to help coordinate the preparation work for the new arrangements, ensure parties are aware of their obligations and to invite industry input for certain aspects of the preparations. The implementation group will be led by Gas Industry Co and industry membership will be by invitation.
127. The implementation group will provide a forum to discuss implementation issues as they arise. The group will not be a substitute for consultation over the OCMPs or any other consultation responsibilities within the regulations.
128. The implementation group will cover all the key components of the new arrangements. Preparations required under the regulations are listed below (with the responsible party in parentheses):
  - critical contingency threshold upper and lower limits for inclusion in the regulations (Gas Industry Co);
  - Outage and Contingency Management Plans including details regarding the determination of contingency imbalances (TSOs);
  - Service Provider Agreement for CCO (Gas Industry Co and CCO);
  - Communications Plan (CCO);
  - consumer information (Retailers); and
  - designation of customers as essential service providers and minimal load consumers (Retailers).
129. It is intended that the Industry Implementation Group will be the primary forum for addressing the implementation-related issues raised in submissions. In the event that particular issues can not be resolved within the Implementation Group that may indicate a need for further analytical and/or legal work to be undertaken. In addition, although Gas Industry Co will need

to commission work on defining the upper and lower limits within which TSOs will set the thresholds, it is expected that the Implementation Group will be consulted in setting those upper and lower limits.

## 4.2 CCO Service Provider Agreement

130. The table below sets out a draft terms sheet to be discussed with Vector as the basis for preparing a service provider agreement for the CCO role.

Section Headings		Content
1.	Background	<p>Pursuant to the Gas Act and the Outage and Contingency Management Regulations (OCMR).</p> <p>Gas Industry Co has been established as Industry Body under 43ZL.</p> <p>Pursuant to regulation 5(1) of the OCMR Gas Industry Co may appoint a Critical Contingency Operator (CCO).</p> <p>Gas Industry Co wishes to appoint the provider as the CCO and the provider has agreed to undertake the role of CCO on the terms set out in the OCMR and this Service Provider Agreement.</p>
2.	Interpretation	<p>Definitions of key terms.</p> <ul style="list-style-type: none"> <li>• Critical Contingency Operator (CCO).</li> <li>• Transmission System Owner (TSO).</li> <li>• Outage and Contingency Management Plan (OCMP).</li> <li>• Communications Plan.</li> <li>• Commencement date.</li> <li>• Information Guide.</li> <li>• Provider – Vector.</li> <li>• Vector transmission system.</li> <li>• Maui transmission system.</li> <li>• Shipper.</li> <li>• Retailer.</li> <li>• Industry body.</li> <li>• Expert adviser.</li> </ul>

Section Headings		Content
3.	Appointment	<p>Gas Industry Co appoints the provider as CCO pursuant to regulation 5(1).</p> <p>The provider accepts appointment as CCO.</p> <p>The provider agrees to provide the services and to be bound by the regulations in its capacity as CCO.</p> <p>The provider warrants that it is:</p> <ul style="list-style-type: none"> <li>• not aware of anything that might adversely impact its ability to provide the services;</li> <li>• has sufficient resources and skills to carry out the services.</li> </ul>
4.	Term	<p>The appointment will commence on the commencement date for a term of up to 5 years.</p> <p>The appointment will expire on one year's prior written notice. Notice may be given by either party.</p>
5.	Services	<p>The services are generally those set out in the Regulations and include:</p> <ul style="list-style-type: none"> <li>• prepare and publish a Communications Plan;</li> <li>• prepare and publish an information guide;</li> <li>• maintain a record of consumer information supplied by retailers;</li> <li>• maintain a gas contingency website with up-to-date information;</li> <li>• recommend OCMPs for approval, in conjunction with expert adviser;</li> <li>• declare Critical Contingencies in line with pre-defined triggers;</li> <li>• maximise opportunities to obtain additional supplies from upstream producers and storage facilities;</li> <li>• direct curtailment of gas supply as necessary during a CC;</li> <li>• direct the restoration process during and following a CC;</li> <li>• terminate Critical Contingencies;</li> <li>• produce a report on any CC;</li> <li>• coordinate test exercises;</li> <li>• keep certain parties informed; and</li> <li>• assist with audits as determined by the industry body.</li> </ul>

Section Headings		Content
6.	Fees	<p>Gas Industry Co will pay the fees set out in schedule 1 to the provider [monthly] in accordance with this agreement.</p> <p>Invoicing provisions [10<sup>th</sup> day of each month for preceding month].</p> <p>Payment provisions [20<sup>th</sup> day of each month for preceding month].</p> <p>Disputed invoices to be paid in full [plus interest provisions]</p> <p>Fee adjusted annually for change in the inflation index.</p> <p>The fees may be varied from time to time on the occurrence of a fee change event.</p> <p>A fee change event is any event that arises as a result of a change to the Regulations that has a material effect on the costs of the provider.</p>
7.	Intellectual property	[Check what, if anything, might be required here]
8.	Confidentiality	<p>The provider must ring-fence confidential information to ensure that it is limited to those people who need the information to discharge the obligation under the agreement.</p> <p>Confidential information is any data which is designated as confidential by the person who supplies it, or which, by its nature, is clearly confidential, and could include information provided by a retailer on its customers.</p>
9.	Information systems	[Access to OATIS—discuss what is required here]
10.	Liability	<p>[Obligations and duties are owed solely to Gas Industry Co and are not obligations and duties for the benefit of any other person].</p> <p>The provider's liability for breach of any obligations under this agreement is subject to the same limitations and caps on liability as apply to the CCO under the Regulations [i.e. CCO liability for breaches limited to the quantum of the annual fee].</p>
11.	Termination	<p>Gas Industry Co may terminate the agreement if:</p> <ul style="list-style-type: none"> <li>• at any time the provider ceases to be the system operator for any or all of the transmission networks;</li> <li>• there is a material breach of the regulations by the provider; or</li> <li>• the provider becomes insolvent.</li> </ul> <p>[In all cases at least 20 business days notice of termination will apply].</p>
12.	Force Majeure	
13.	Insurance	[No requirement for provider to maintain insurance in respect of the services].
14.	Assignment	No assignment by either party.

Section Headings		Content
15.	Dispute resolution	<p>If any dispute arises under this agreement that is not also a dispute under the Regulations:</p> <ul style="list-style-type: none"> <li>• The parties will first endeavour to resolve the dispute (bona fide); and</li> <li>• [Mediation or arbitration?].</li> </ul>
16.	Miscellaneous	The contract to be published on Gas Industry Co's website.
17.	Transfer to another party	<p>On expiry or termination:</p> <ul style="list-style-type: none"> <li>• continue to provide (and be paid for) the services for the necessary transition period;</li> <li>• cooperate reasonably in the transition of the services to a new provider;</li> <li>• supply (and be paid for) any training required for the new provider personnel in order to achieve the transition; and</li> <li>• transfer any data or processed data necessary to allow the new provider to assume the CCO role.</li> </ul>
18.	Performance standards	<p>Meet once a year to review performance over the previous 12 months and to set requirements for the forthcoming year.</p> <p>(Regulations require the CCO to produce an incident report and a performance report following a critical contingency. No report is required from the CCO on the annual test.)</p> <p>CCO to provide:</p> <ul style="list-style-type: none"> <li>• log of CCO activities during the year (including any significant events where a critical contingency was avoided);</li> <li>• list of all compliance and audit activities that may incur costs that are additional to the base fee;</li> <li>• results of test exercise during the year, and/or critical contingency event(s) during the year;</li> <li>• latest set of plans from the contingency website;</li> <li>• changes to plans during the previous year;</li> <li>• programme to test during the following year; and</li> <li>• enhancements to the arrangements.</li> </ul>

Schedule 1		Fees
1.	Composition of fees	<p>Base fee.</p> <p>Compliance fees.</p> <p>Audit fees.</p>

Schedule 1		Fees
2.	Base fee	<p>The base fee will be set on the basis that it will [recover the provider's estimated incremental costs of providing the services].</p> <p>The base fee will include an estimate of the expected cost of managing contingencies (no event fee is proposed).</p> <p>The estimate of incremental costs is to be:</p> <ul style="list-style-type: none"> <li>• Determined by comparing the costs of delivering the services relative to the cost of the current arrangements (including NGOCP); and</li> <li>• Based on normal commercial rates and estimates of time spent preparing and approving plans, maintaining information, coordinating gas contingencies, and conducting tests.</li> </ul>
3.	Compliance fees	<p>The compliance fees will be payable to the provider in respect of each complaint or alleged breach made by a participant as follows:</p> <ul style="list-style-type: none"> <li>• where the provider is the subject of the complaint or alleged breach, and the provider is subsequently cleared, the reasonable costs of the provider in co-operating and providing information;</li> <li>• where the provider is the subject of the complaint or alleged breach, and the provider breach is subsequently proved, no compliance fees will be payable; and</li> <li>• where the provider is not the subject of the complaint or alleged breach, the reasonable costs of the provider in co-operating and providing information.</li> </ul>
4.	Audit fees	<p>The audit fees will be payable to the provider in respect of [any amounts payable by the provider to third parties in respect of audits of software and systems required under the regulations].</p>