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Dear Ian

# **Critical Contingency Arrangements**

Genesis Power Limited, trading as Genesis Energy, welcomes the opportunity to provide comments to the Gas Industry Company on its consultation paper 'Gas Outage and Contingency Management Arrangements: Supplementary Consultation Paper' dated December 2007.

## **Introductory Comments**

Genesis Energy supports the Gas Industry Company's approach of carrying out supplementary consultation on outstanding issues following the statement of proposal on contingency arrangements issued last year. Genesis Energy believes that this is the appropriate approach in light of the submissions received on the statement of proposal and the nature of the changes under consideration.

Genesis Energy believes that much of the work in the supplementary consultation paper is of good quality and improves on the original statement of proposal. Genesis Energy supports the use of an industry group to carry out further work on critical contingency imbalances, but believes that this work should be done before a recommendation for regulations is put forward as the outcome of this work has strong interactions through the remainder of the policy design.

# A note on terminology

Genesis Energy supports the changes Gas Industry Company has made to terminology. These changes should enhance the legibility of the regime. Genesis Energy suggests that further improvement could be made by dropping the term 'outage and contingency' altogether and standardising on 'critical contingency'.

In particular, the regulations could be renamed "Gas (Critical Contingency) Regulations" and the transmission system owners' (TSOs') plans could be renamed "Critical Contingency Management Plans".

#### **Price and Command**

In Genesis Energy's view, the aspects of the proposal that would most benefit from further policy work are:

- 1. the critical contingency pricing methodology;
- 2. the interaction between the command-based (curtailment) intervention and the incentive-based (pricing) intervention; and
- 3. the critical contingency imbalance methodology and its effects on the incentive intervention and interface with pipeline codes.

In part, Genesis Energy suggests that the way forward with these issues lies in scenario analysis and a critical evaluation of where the appropriate balance lies between complexity and simplicity.

## Pricing methodology and interacting interventions

The proposal retains an ex-post expert determination approach to contingency pricing, with an overarching aim of mimicking prices in a hypothetical short-term market for gas. Genesis Energy suggests that this approach errs too far on the side of complexity and that the gains to be made by adopting a simpler, more pragmatic approach may outweigh any potential downsides.

Establishing prices through an efficient short-term market is undoubtedly desirable in a pure economic sense. As a lack of market infrastructure and depth (plus the potentially short timeframes of critical contingencies) makes this approach impracticable, the next-best approach of mimicking such a market has been chosen. However, much of the benefit that would be achieved by a market price (allocating scarce resources to their highest value use) is partly undone by at least two factors:

1. curtailment overrides (or at least strongly interferes with) the effect of pricing. This is particularly true for consumers in the first curtailment band, as they will be ordered to curtail as soon as a critical contingency is declared. Such consumers must then weigh up not just the price of gas, but also the price of non-compliance with curtailment instructions; and

2. one of the biggest value drivers for gas during a contingency is the benefit of avoiding mass-market consumer disconnection (and reconnection), but there is limited means for a pricing signal to be generated for this use (or non-use) of gas. A price that does not internalise this cost is unlikely to produce the best 'NZ Inc.' outcome.

We are left then with an imperfect estimate of a price that would likely be an imperfect signal anyway. Plus, the cost of establishing a pseudo market price (including the cost of the expert) is likely to be significant.

The gas contingency price also has many other possible functions. Among these are:

- 1. stimulating production during a critical contingency;
- 2. incentivising long-run efficient behaviour;
- 3. incentivising short-run efficient consumption decisions;
- 4. compensating for 'lost' gas and adjusting imbalances; and
- 5. paying for shared or public costs of a contingency.

Of these, Genesis Energy suggests that the first two items are the most important. Genesis Energy suggests that using price to incentivise consumption reduction during a critical contingency is of secondary importance, given the effect of the curtailment intervention. Energy agrees that it is appropriate to dismiss compensation as a purpose for pricing intervention. Genesis Energy has not formed a view on use of critical contingency pricing to recover shared costs and suggests further work is required in this area.

Taken together, Genesis Energy considers that all of these factors support the use of a more straightforward critical contingency price with either the or the methodology, established in advance. Where the methodology is established in advance, Genesis Energy suggests that it should be fully developed and based on a well understood and transparent reference price (such as the electricity spot market price). Ex ante price determination is likely to be most effective in terms of encouraging parties to make arrangements, where cost-effective, to reduce the financial impact of gas contingencies.

If the Gas Industry Company has concerns about perverse pricing outcomes arising from an ex ante methodology under some scenarios, then Genesis Energy suggests that provision for expert determination could be retained, but reserved for particular circumstances.

# Imbalance methodology

Developing the critical contingency imbalance methodology is an area where scenario analysis could be particularly useful. Genesis Energy suggests that scenario analysis should consider not only different contingency event scenarios, but incentive effects on various parties. For example, the choice of imbalance methodology impacts the degree to which critical contingency pricing will 'bleed over' into the pre- or post-critical contingency periods. This in turn alters the effect of the pricing intervention.

On balance, Genesis Energy supports a daily imbalance methodology at this stage. This approach would not only be simpler, but may have other benefits such as:

- 1. deterring parties from forcing a critical contingency event to their advantage; and
- 2. incentivising consumers to act early to prevent contingencies elevating to critical contingencies.

Genesis Energy recommends that further work is also required to understand the effect of terminating a critical contingency event, with line pack at a lower or greater level than at the beginning of the event. This potentially adds significant complexity as it raises the question around the ownership of line pack, the application of tolerances and the calculation of critical contingency payments.

#### Simplicity – alternative fuel capability

On the theme of simplicity, Genesis Energy also suggests that differential treatment of consumers with alternative fuel capability should be removed. In part, this is because the critical contingency price already offers incentive to invest in dual fuel capability. In addition, there is a workability problem with this approach.

Under the proposed mechanism, retailers will notify the critical contingency operator which consumers have alternative fuel capability<sup>1</sup>. The critical contingency operator will then curtail dual fuel consumers in advance of single fuel consumers. This provides a disincentive for consumers to reveal (or invest in) alternative fuel capability. The alternative of a proactive regulator would be prohibitively expensive.

There is also considerable scope to interpret what is meant by 'alternative fuel capability'. For example, many electricity generating consumers have multiple power stations with a range of fuels. Would a generator with both gas and hydro plant be considered to have alternative fuel capability?

<sup>&</sup>lt;sup>1</sup> Draft Gas (Outage and Contingency Management) Regulations, regulation 37(1)(a).

# Simplicity – regional contingencies

The Gas Industry Company recommends that the pricing intervention should not apply to regional contingencies. Genesis Energy supports this proposal as it would simplify the regime as it applies to regional contingencies.

The logic for excluding regional contingencies from the pricing intervention is that it is unlikely that producers will be involved in regional contingencies and so there is no way for the contingency price to stimulate additional production. While contingency pricing could still stimulate long-term efficient decisions (such as investment in alternative fuel capability), Genesis Energy agrees that this effect is unlikely to be strong enough to warrant extension of the pricing intervention to cover regional contingencies.

Genesis Energy recommends that the definition of 'regional contingency' in the draft regulations<sup>2</sup> requires further attention. As drafted, the definition does not provide sufficient clarity and does not align with the logic for excluding regional contingencies from the pricing intervention. It may be preferable to develop a definition that describes the isolation of a part of a transmission system from any significant sources of gas (for example, production fields or storage). A principles-based definition would be more durable and may also prove more workable.

#### **Deferred and Devolved**

One of the themes arising from the supplementary consultation paper is the question of what should be in the regulations. This question considers whether design features should be fixed through regulations, or devolved to some other body and deferred to a later date. The most important strands to this problem are:

- 1. the critical contingency trigger threshold;
- 2. the curtailment bands;
- 3. the imbalance methodology; and
- 4. the contingency price methodology.

The Gas Industry Company has adopted a range of approaches to the question of where a power should lay and what checks should apply to that power. For the examples above, the following table summarise the approaches as proposed.

<sup>&</sup>lt;sup>2</sup> Regulation 72(1) – "a regional critical contingency means a critical contingency where the effects of the critical contingency were restricted to only a region of New Zealand".

**Table 1 - Devolving Powers to Other Parties** 

Matter	Reg	Party	Checks
Thresholds	23(1)(a)	TSOs	Guidance in regulations.
	23(1)(b)		Consult stakeholders.
			Expert adviser review.
			GIC approval.
Bands	Sched. 1	GIC	Guiding principles in regulations (schedule, r1).
Imbalance guidelines	33	GIC	Objectives in regulations (r33).
			Consult on amendments.
Imbalance	23(1)(h)	TSOs	Consult stakeholders.
methodologies			GIC approval.
Price	66	Expert	Guidance in regulations:
			o Purpose (r62)
			o Objective (r66(2))
			<ul><li>Limited instruction (r66(3)).</li></ul>

Genesis Energy suggests that there are two main considerations to be taken into account in assessing whether to devolve a power:

1. What is the effect of the design parameter on the overall policy design?

This considers how completely the regulations need to define the policy. If too many key design elements are deferred to later decision points, or not enough guidance is given in the regulations, then it becomes very difficult to understand what the effect of regulation will be. It can also become difficult to manage the interactions between design parameters - especially where decisions are devolved to a range of parties. In effect, the regulations could be overly 'hollowed out'.

2. What are the appropriate checks on any given power?

The power to make regulations carries a heavy set of checks and balances. This limits flexibility, but also limits arbitrary exercise of powers that could significantly affect rights. As a matter of principle, the extent to which a power is devolved and the set of checks that accompany that devolution should be appropriate to the magnitude of the power.

Often the motivating factor for devolving powers relates to cost or flexibility. At other times, the motivation is more to do with deferring difficult or complex decisions to a later stage sometime after regulations are promulgated. Any of these motivations can be entirely appropriate, but it does depend on the nature of the power involved and on the nature of the checks on that power.

The most important design decisions proposed to be deferred and devolved are listed and discussed below.

The threshold for triggering a critical contingency

This parameter determines how far the intervention extends; a high threshold gives the regulations broader effect, while a low threshold gives the regulations more narrow effect. As such, this parameter is central to the proposed intervention.

The arguments for devolving this decision include the benefits of flexibility to respond to changing pipeline and industry dynamics (including the possibility to ease the threshold as confidence in the intervention grows).

The Gas Industry Company's proposal is for TSOs to set the threshold in their outage and contingency management plans (OCMPs). OCMPs are subject to rigorous consultation, expert review, and Gas Industry Company approval processes.

On the whole, Genesis Energy agrees that the Gas Industry Company's approach is appropriate. However possible improvements would be:

- 1. Allow the Gas Industry Company to initiate amendments to threshold levels (to give effect to the flexibility benefits identified); and
- 2. If possible, provide more clarity in the regulations about how severe a gas contingency should be before the critical contingency is declared. Draft regulation 23(1)(a) may fulfil this requirement, but could perhaps be adapted for inclusion as a standalone provision in the regulations.

### The curtailment schedule

The curtailment bands are at the heart of the curtailment intervention. These determine what class of consumer is curtailed first in the event of a critical contingency.

The primary argument for devolving this decision is that there is a strong prospect that an improved approach to curtailment could be developed in the future. Also, the bands may need to respond to industry developments.

The Gas Industry Company's proposal is for the bands to be set out in a schedule to the regulations, but to permit the Gas Industry Company to vary the bands provided any variation is consistent with a set of principles also set out in the regulations.

Genesis Energy supports this general approach, but suggests that there should be more robust checks on the Gas Industry Company's ability to specify new arrangements. For example, the Gas Industry Company should be required to consult on any proposed variation.

## The critical contingency imbalance methodology

The imbalance methodology is one of two factors, along with price, at the heart of the pricing intervention. The imbalance methodology determines who pays (or gets paid) for what.

The primary argument for devolving this decision appears to be the need to defer the decision in this complex area. However, devolving this power may also provide flexibility to allow the methodologies to dovetail well with pipeline codes.

The Gas Industry Company's proposal is for imbalance methodologies to be incorporated in OCMPs, with a requirement that the methodologies are consistent with a set of imbalance guidelines developed by the Gas Industry Company. The methodologies would be subject to the rigorous OCMP approval process. The Gas Industry Company is required under the regulations to consult on any amendment to the guidelines, but not on the initial set of guidelines<sup>3</sup>. The regulations also set out objectives for the quidelines.

Genesis Energy is sympathetic with the need to spend more time working through the form of the imbalance guidelines and supportive of the general approach of separating out imbalance guidelines from the actual methodologies<sup>4</sup>. However, Genesis Energy also has some reservations about the approach. These reservations are around the effect on the overall policy design of deferring such a key design element and around the strength of the checks on the power to set guidelines.

To address these problems Genesis Energy suggests that:

- 1. Design of the critical contingency imbalance approach should be advanced further before a recommendation for regulations is made to the Minister. Genesis Energy supports the use of an industry group to progress this stream of work.
- 2. Checks on setting imbalance guidelines should be strengthened. One option would be for guidelines to be set as rules.

<sup>&</sup>lt;sup>3</sup> Gas Industry Company suggest in the consultation paper that they will consult with the industry over the contents of the guidelines, however this is not mirrored in the draft regulations.

<sup>&</sup>lt;sup>4</sup> Genesis Energy also welcomes the Gas Industry Company's intention to convene an industry group to scope issues and develop solutions.

## The critical contingency price

Price is the other component at the heart of the pricing intervention. Price not only dictates the strength of the pricing incentive, but also materially alters the impact of a critical contingency on out-of-balance participants.

Devolving the decision on price is a policy decision. Devolving the decision on pricing methodology reflects the complexity of this design element plus concerns around unintended outcomes.

The Gas Industry Company's proposal is for price to be set by an industry expert to be appointed following any critical contingency. The regulations establish a process for appointing the expert, set an objective for the contingency price, provide a list of three matters for the expert to take into account, and provide a more explicit instruction for the circumstance where an electricity generator is the last plant curtailed.

As discussed earlier in this submission, Genesis Energy believes that an ex ante price would better meet the Gas Industry Company's objectives and suggests that ex post price determination should be reserved for exceptional circumstances. Alternatively, Genesis Energy suggests that a fully developed pricing methodology based on a well understood reference price should be included in the regulations.

Genesis Energy has some reservations that the Gas Industry Company's proposal does not adequately fix in place one of the most important aspects of the policy design.

## **Funding**

Over the past year, Genesis Energy has become increasingly uneasy with the 'dedicated fees' approach proposed by the Gas Industry Company for funding implementation and operation of major work stream outputs. This approach circumvents the statutory levy setting process for the sake of flexibility and an ability to tailor structures to suit each output. While these features are attractive to the Gas Industry Company, Genesis Energy is concerned that they come at too high a cost in terms of loss of accountability. The statutory constraints on levy setting are inflexible with good reason.

For further discussion of this topic, please refer to Genesis Energy's submission on the 2008/2009 levy.

#### Summary

Genesis Energy supports many of the changes that the Gas Industry Company proposes in the supplementary consultation paper, but believes that there are a number of areas where further work is required before a recommendation for regulations is made. These include the:

1. critical contingency pricing methodology;

- 2. interaction between the command-based (curtailment) intervention and the incentive-based (pricing) intervention; and
- 3. critical contingency imbalance methodology and its effect on the incentive intervention and interface with pipeline codes.

Genesis Energy supports an ex ante critical contingency price focussed on stimulating production during a contingency and incentivising long-run efficient behaviour. Genesis Energy does not support sub-day critical contingency imbalances at this stage, but believes further work should be carried out in this area. Genesis Energy believes that the proposal to distinguish alternative fuel capability within the curtailment schedule is not required and will not be workable. Genesis Energy supports the proposal that the pricing intervention should not extend to regional contingencies, but suggests that the definition of 'regional contingency' could be improved.

Genesis Energy believes that the treatment in the draft regulations of setting the critical contingency threshold, establishing the curtailment schedule, and setting the imbalance methodology could be improved to ensure that regulations are sufficiently complete and that there are appropriate checks on substantive powers.

If you would like to discuss any of these matters further, please contact me on 04 495 6357.

Yours sincerely

John A Carnegie

Regulatory Affairs Manager

Genesis Energy

# Appendix One – Responses to specific consultation questions

QUESTION	COMMENT
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?	Yes.
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 line pack thresholds is preferred?	Genesis Energy supports the approach taken in the draft regulations and suggests the following improvements:  1. Allow the Gas Industry Company to initiate amendments to threshold levels (to give effect to the flexibility benefits identified); and  2. If possible, provide more clarity in the regulations about how severe a gas contingency should be before the critical contingency is declared. Draft regulation 23(1)(a) may fulfil this requirement, but could perhaps be adapted for inclusion as a standalone provision in the regulations.
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?	Genesis Energy supports the Gas Industry Company proposal to exclude domestic consumers. This is a simpler approach that is unlikely to sacrifice anything in the way of effectiveness.  Genesis Energy suggests that consumers are likely to respond well to calls for voluntary demand reduction (as they have in the past).

QUESTION		COMMENT
pr ar 5. sc	o you agree that the roposed curtailment rrangements outlined in .33 and as specified in the chedule to the regulations re appropriate?	Genesis Energy supports the approach specified in paragraph 5.33 of the consultation paper, but suggests that the regulations should at least require the Gas Industry Company to consult before varying the curtailment arrangements.  As discussed in the cover letter, Genesis
		Energy suggests that the curtailment bands in the schedule should not differentiate consumers with alternative fuel capability.
	o you agree that defining	No.
contingency imbalances on a sub-day period is more likely to fulfil the objectives, and that the feasibility of this should be examined further?		Genesis Energy considers that daily imbalances are more likely to provide the correct incentives. Sub-day imbalances may incentivise parties to hold onto gas, or to continue to take gas at a higher rate until a critical contingency is declared.
		Genesis Energy believes that thorough scenario analysis would be needed to support sub-day imbalances.
		There is also a need to examine how the critical contingency imbalance regime can integrate with the code-based imbalance regimes in MPOC and VTC in a way that is operationally (and legally) seamless and doesn't create perverse incentives.
		For example, there may be a need to alter MPOC so that the incentives pool is automatically triggered on any day that a critical contingency is in effect.
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?		Genesis Energy agrees that further work is required in this area and is comfortable with the idea of a two-tiered approach whereby TSOs set the detailed methodology in their OCMPs.
		However, Genesis Energy suggests that further work in this are should be completed prior to the regulations being recommended to the Minister. Also, setting imbalance guidelines as rules may place a more appropriate set of checks on this power.

QUESTION	COMMENT
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?	Yes.  Genesis Energy suggests that the definition of regional contingency in the draft regulations should be altered so that it pertains only to isolation of a portion of a transmission system from production and storage.
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?	No.  Genesis Energy believes that further work is required on the pricing methodology and favours an ex ante approach focussing on stimulating production during a critical contingency and incentivising long-run efficient behaviour, with incentivising demand reduction as a second-tier focus (due to the effects of the curtailment intervention).  Genesis Energy suggests that the MPOC daily incentive price could be an appropriate basis for ex ante price determination. This would enable a seamless interface between contractual and regulatory processes.  It could also be appropriate to set a floor 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?	Refer response to Q8.
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?	Yes.
Q11:Do you agree that the CCO should be asked to spread its up-front costs over the duration of the agreement?	Genesis Energy believes that service providers should be funded through the Gas Industry Company's levy setting power, not through dedicated fees.

QUESTION	COMMENT
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?	Genesis Energy believes that service providers should be funded through the Gas Industry Company's levy setting power, not through dedicated fees.
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?	Genesis Energy considers the curtailment intervention to be injunctive in nature.  Whether or not specific provision is required within regulations to allow injunctive relief is a legal question and Genesis Energy offers no opinion here. However, if Gas Industry Company determines that specific provision is required to enable recourse to the Courts, then Genesis Energy agrees that this would be appropriate.
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?	Genesis Energy is comfortable with the idea of recourse to Courts rather than the rulings panel, but queries whether an order could realistically be obtained in an appropriate timeframe to suit many of the possible contingency scenarios.