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Ian Dempster
General Manager Operations
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PO Box 10-646
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Dear Ian

Submission on Downstream Reconciliation Options

1. Vector Limited ("Vector") welcomes the opportunity to make this submission on the Gas Industry Company's ("GIC") consultation paper, *Downstream Reconciliation – Options*, dated 16 December 2011.

2. The Review of the Gas (Downstream Reconciliation) Rules 2008 ("the Rules"), of which this consultation is the first formal step, should be treated as a high priority. While the Review is expected to be a long and complex process, it is necessary to achieve more efficient and fairer outcomes for participants in the downstream reconciliation system and consumers who ultimately bear the cost of its operation.

3. No part of this submission is confidential and Vector is happy for it to be released publicly.

Key issues

4. Vector's consideration of the various options is informed by what would better meet the purpose of the Rules, which is "to establish a set of uniform processes that will enable the fair, efficient, and reliable downstream allocation and reconciliation of downstream gas quantities".

5. Any revisions of the Rules should promote efficient market behaviour by industry participants, or at least not contribute to any more inefficiency. More efficient Rules would lower costs for all market participants, promoting gas trading and a more competitive market, which benefit consumers.

6. Vector's submission focuses on the resolution of issues that would have the greatest impact in improving efficiency, ensuring fairness, and reducing costs without compromising future flexibility. The achievement of such would ensure the widespread acceptability, hence sustainability, of the revised Rules.

7. Vector considers that the key issues are:

   - increased accuracy of initial allocation of Unaccounted-for-Gas ("UFG");
   - allocation of ongoing costs;
   - unnecessary compliance costs; and
   - codification of existing exemptions.

8. The development by the GIC of practical and innovative options to address some of the above, which are long-standing issues, is appreciated. Vector's views on these issues are outlined below and explained further in Appendix A.

Increased accuracy of initial allocation of UFG

9. Vector supports the GIC's proposal to further investigate alternatives that would preferentially allocate UFG to causers. Greater accuracy in the initial allocation of UFG will efficiently attribute the cost of balancing to parties (who in later allocations have the UFG accurately allocated to them). This creates the correct incentive as the causer pays for UFG and the associated balancing costs. This would meet the efficiency and fairness objectives of the Rules.

10. The current arrangement, which socialises UFG during the initial allocation, does not provide sufficient incentives for all retailers to improve the accuracy of their initial historic and forward estimates.

11. Vector does not believe a dividing line should identify which retailers are considered to be "causers" and which are not. UFG should be pro-rated amongst all retailers based on the accuracy of their performance, say in the previous six months. All retailers should be assigned their share of the UFG to incentivise them to make the right level of investment in improving their accuracy levels.

12. Vector considers further work needs to be carried out on the proposed options and would like to see more details regarding any alternative algorithm on the initial allocation of UFG. A cost-benefit analysis would be necessary to inform the industry of the cost-effectiveness and efficiency of any alternative. It would be reasonable to subsequently conduct a high level trial of the preferred alternative, to ensure it would work across all gas gates, including those with an atypical mix of customers.

More efficient allocation of ongoing costs

13. Vector has stated in previous submissions that the current allocation of ongoing costs is neither fair nor efficient. In principle, the allocation should be based entirely on the number of ICPs held by retailers, which drive the costs of administering the Rules. Allocation based on ICP numbers will also be consistent with how other retail levies and market fees are allocated.

14. At present, retailers that do not have mass market customers are effectively subsidising those who do. Cross-subsidisation between sub-sectors does not provide the right incentives for all downstream parties to keep their costs down.

15. Vector is willing to support a solution that would represent a significant improvement over the current inequity.

Removal of unnecessary compliance costs

16. It is widely accepted by market participants that some Rules result in unnecessary compliance costs. Vector strongly supports the GIC's proposal of removing the 'triple jeopardy' in consumption reporting of estimated Allocation Group 1 and Group 2 data to better meet the efficiency objective of the Rules. Targeting only serious breaches will reduce regulatory compliance costs and internal reporting costs for market participants.

17. It is also an opportune time to clarify the intent of some of the Rules and revise them for greater clarity, having been interpreted in various ways by affected parties. Clearly and effectively expressed rules reduce the need for future exemptions and the cost of dispute resolution.

Codification of existing exemptions

18. Vector recommends that certain exemptions, which support the purpose of the Rules, be codified. These would include, among others, Vector Transmission's exemption from Rule 41, which allows the application of metering corrections. In most cases, this process generates higher quality data than the Allocation Agent's estimates, providing a more efficient outcome for the relevant market participants.

19. Exemptions should also be retained or incorporated in the Rules for cases where the costs of complying with the Rules significantly override any purported benefits.

20. While Vector sees the importance of only allowing exemptions under exceptional circumstances, ie high-threshold exemptions, it is fundamentally important for the downstream reconciliation system to retain some flexibility for unforeseen

circumstances or unintended consequences of the revised Rules. As the experience with the ongoing deployment of smart meters in the electricity sector has shown, technological changes would undoubtedly bring challenges and opportunities that the industry could not totally anticipate.

Closing comment

21. Vector's responses to specific questions in the Options Paper are indicated in Appendix A.

22. We are happy to engage with the GIC and industry participants on the various options being considered and other downstream reconciliation issues directly, or preferably through the advisory group proposed to be formed for this review.

23. If you have any questions, or require further information, please contact Luz Rose, Senior Regulatory Analyst, on 04 803 9051 or Luz.Rose@vector.co.nz.

Kind regards

Bruce Girdwood
Manager Regulatory Affairs

Appendix A: Responses to Specific Questions

QUESTION	VECTOR'S COMMENTS
Q1: Do participants agree that the option of making the SADSV available in advance of AG 4 and 6 initial consumption submissions is worth pursuing?	Vector agrees that making the SADSV available in advance of Allocation Groups 4 and 6 initial consumption submissions is worth pursuing. In concept, the proposal appears to improve the accuracy of initial submissions; however, timing would be critical. All proposed alternatives would delay the receipt of Balancing Peaking Pool ("BPP") positions. Alternative A would delay the issuance of transmission and BPP invoices by three days every month, which would be unacceptable to Vector Transmission. Alternative B would also be problematic for Vector Transmission. Moving the deadline forward to 08:00 would increase the amount of unvalidated injection metering data submitted to the Allocation Agent in place of "actual daily energy quantities injected" (as required by Rule 41) and therefore increase the number of Vector Transmission breaches under the current Downstream Reconciliation Rules ("the Rules"). Vector suggests another alternative (Alternative C), which is a combination of Alternatives A and B: • Business Day 4 – **10am**: TSO submits injection data; **10am**: retailers submit TOU consumption data; **3pm**: Allocation Agent publishes SADSV.

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	• Business Day 5 - **midday**: Retailers submit non-TOU consumption data. • Business Day 6 – **8am**: Allocation Agent publishes initial allocation. Vector recommends that Alternative C be further investigated. While Vector endorses this option, it is noted that this would delay the issuance of BPP positions for some months. In any case, it is good regulatory practice to consider all options and conduct a cost-benefit analysis. Should retailers, transmission system operators, and the Allocation Agent agree with the above recommendation (Alternative C), Vector suggests that it should be implemented by way of an exemption before the full set of changes to the Rules are made to facilitate the transition.
Q2: Gas Industry Co seeks feedback on the feasibility of staggering the submission of TOU and non-TOU data for the initial allocation and delaying publication of the results of the initial allocation. We also seek an indication of whether retailers would be able to accommodate the 24-hour period for processing and submitting non-TOU date once they received the SADSV.	Vector agrees with this proposal and in option C above suggests that an even shorter period for submitting non-TOU data could be achievable once retailers receive the SADSV.
Q3: Do you agree that preferentially allocating UFG to causers is worth investigating as a possible alternative to	Vector fully supports preferentially allocating UFG to causers but would prefer this be implemented in addition to Option 1. Consistent with the fairness

QUESTION	VECTOR’S COMMENTS
the global allocation method for the initial allocation? If not, please provide reasons.	principle, parties who cause UFG should get allocated the UFG in the initial allocation. A high level trial of an alternative UFG allocation method should be run. Care would need to be taken to ensure it would work for all gas gates, including those with an atypical mix of consumers.
Q4: What is your view of using the difference between a retailer’s initial and interim submissions as the measure of accuracy?	Vector agrees with this proposal.
Q5: If a rolling average were to be used as the basis for measuring accuracy, how many months would you suggest the average be taken over?	A six-month period would be reasonable. It would cover the changes of the seasons but is short enough to reflect improvements in accuracy of retailers’ initial submissions.
Q6: One suggestion is to define “causers” as the bottom x% of retailers when ranked by submission accuracy. What value would you suggest for “x”?	Vector does not believe a dividing line should be used to identify which parties are the “causers” of UFG and which are not. UFG should be pro-rated amongst all retailers based on their performance accuracy in the previous six months. All retailers should get a share of the UFG to incentivise all parties to improve their performance. If only some of the retailers are considered to be the causers, this may cause administrative complexity as the causers will vary across gas gates.

QUESTION	VECTOR'S COMMENTS
Q7: Do you agree that it is worth investigating the feasibility and cost of implementing daily allocations (D+1) at a pipeline level? Please provide reasons for your answer.	Vector does not see overriding benefits in implementing D+1 or 'D+1 light', which would appear to be a backward step in ensuring greater accuracy. Data using this methodology may not be accurate or not as accurate as current initial data. The Options Paper points out "it is likely that gas gate-level apportionment would be significantly less accurate at some gas gates than the existing initial allocation results...due to the limited amount of data the D+1 "light" allocations would be based on" (page 34). D+1 light could cause issues. Vector is concerned about the effectiveness of creating a profile for Allocation Group 2 sites due to the uncertain nature of customers' consumption due to shutdowns, maintenance, differing seasonal start and end dates, and differing work patterns due to the economic environment. While a retailer in close contact with its customers can take these variances into consideration whilst purchasing gas, it would be difficult to create an automatic profile for these customers based on their last year or three years' consumption. More evidence is required to show that more accurate data and cost efficiency is derived from the implementation of D+1 light before this option can be considered further. Vector is concerned that under D+1 Shippers may dispute any balancing costs they believe to be inaccurate based on less accurate allocations.
Q8: If D+1 were to be implemented for BPP charges, would it be a concern for your organisation if transmission charges continued to be based on the existing initial allocation methodology?	Vector does not agree with this proposal. Clear benefits need to be shown from the implementation of D+1 for BPP charges. The accuracy of data derived could be inferior to the current arrangements.

QUESTION	VECTOR'S COMMENTS
Q9: Do you agree it is worth investigating changing the initial allocation algorithm? Does your organisation have any suggested algorithm(s)?	Vector agrees that changing the initial allocation algorithm is worth investigating. An algorithm that proportionately allocates UFG to causers needs to be developed and subsequently released for consultation.
Q10: Do you agree that the purpose of the Reconciliation Rules would not be better served by having retailers who trade at direct connect gas gates subject to the global allocation methodology? If not, please provide your reasoning.	Vector agrees with this proposal.
Q11: If you agree with Q10, do you also agree that the Reconciliation Rules should be amended as described above so as to obviate the need for exemptions in respect of direct connect gas gates?	Vector agrees with this proposal. In addition to, and as a consequence of, the amendments referred to in Q10, which removes the need for retailers to submit data at direct connect gas gates and for the allocation agent to perform an allocation, the Rules should be amended to remove the need for transmission system owners to provide daily injection information (Rule 41) and publish estimated day-end volume injection quantities each day (Rule 42) (these will still be published under our obligations in the Vector Transmission Code ("VTC")), and for the Allocation Agent to produce estimates (Rule 43) in respect of direct connect gas gates.
Q12: Do you agree that the global methodology fails to produce acceptable results as gates that have a very high proportion of TOU load?	Vector agrees with this proposal.

QUESTION	VECTOR'S COMMENTS
Q13: Do you agree with the proposal to incorporate within the Reconciliation Rules provision for a framework for application of the global 1-month methodology at gas gates that meet specific criteria? If not, please provide your reasons and your suggested alternative approach to addressing the shortcomings of the global methodology in such circumstances.	Vector agrees with this proposal.
Q14: Do you consider that all gas gates should have gas measurement systems installed? If not, please provide reasons. If you consider that there should be a threshold below which gas gate meters are not necessary, please describe both the threshold and the basis of measurement (e.g. monthly (average or peak) or annual volumes).	Vector disagrees with the GIC's preference to have gas measurement systems at all gas gates. Retaining the status quo would ensure that all new gas gates have metering installations while retaining all existing metering. The analysis in the Options Paper is founded on the premise that any UFG existing at an unmetered gas gate will appear as transmission system UFG and be socialised among Shippers. This is not the case. Any UFG existing at an unmetered gas gate will be part of Vector's Running Imbalance, therefore Vector, not Shippers, is liable for managing it. The GIC's analysis shows that a metering installation could have a payback period of 15 years. This analysis is unrealistic because: a) it is based on a site that is not an unmetered gas gate and does not have an oversized meter; b) the annual volume at that gas gate is approximately 5-6 times higher than any of Vector's unmetered or oversized metered gas gates; and c) the design life of some of the metering equipment is less than 15 years.

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	Assuming 3.5% UFG at $7.00/GJ, the shortest payback period for the installation of any of these meters would be 250 years, for Okoroire Springs. The table below indicates the actual 2011 offtake for Vector's seven unmetered gas gates and two gas gates with oversized meters. With very small volumes involved, it is clearly uneconomic to install meters at these gates. It would cost between $15,000 and $50,000 to install a meter at each of the gas gates below, depending on the delivery point, excluding ongoing maintenance and data processing costs.

	Offtake per year (GJ)
Flockhouse*	152
Te Teko*	2,262
Kuku	718
Matapu	413
Oakleigh	17
Okoroire Springs	672
Pungarehu 1	366
Te Horo	692
Wellsford	1,116

* Oversized meters

In some cases, it may be very difficult to install a meter due to the flow profiles at these gates and, in many cases, technically difficult due to space restrictions.

Vector is not aware of any operational difficulties for the Allocation Agent or financial detriments to Shippers in using consumption quantities instead of

QUESTION	VECTOR’S COMMENTS
	injected quantities to satisfy the requirements of the Rules. Should the installation of measurement systems be made mandatory at all gas gates, it would make commercial sense for Vector to decommission those gas gates that would become uneconomic as a result of this requirement.
Q15: Do you agree that, for the purposes of this review, gas gates with oversized meters should be treated in the same way as gas gates that do not have meters installed? If not, please provide reasons.	Gas gates with oversized meters should be treated in a similar manner as gas gates without meters, for the same reasons indicated in our response to Q14.
Q16: Do you think Gas Industry Co should consider making an explicit rule to enable correction of AUFG factors or should the exemption process be relied upon?	An explicit rule to enable the correction of AUFG factors should be considered. This is more cost effective and efficient, and provides greater certainty than relying on the exemption process.
Q17: Do you agree that the way in which ongoing costs are apportioned among retailers should be changed to 50:50 mix of volume and ICP numbers? If not, please provide your preferred apportionment method with supporting reasons.	Vector believes that an efficient and fair system of apportioning the ongoing costs of administering the Rules is one that is based totally on the number of ICPs held by retailers. This would be consistent with how other retail levies and market fees are allocated. The status quo can only be defensible if it can be robustly established that TOU customers, who account for a large proportion of gas volumes, drive the costs of reconciliation or receive a substantial proportion of the benefits. Vector strongly argues this is not the case. The costs of downstream reconciliation are significantly affected by the number of ICPs. The great majority of ICPs are non-TOU customers, which account for a more complex system, greater number of required allocations and higher administration costs.

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	The marginal cost of processing data for a new ICP beyond a certain level is likely to be low because of economies of scale in information technology costs. This may be valid on a marginal cost basis but not on an average cost basis, which is the relevant measure for determining costs to be shared. In a market where there were only TOU customers, the costs of administering the Rules would be substantially less because of the relative benefits of lower complexity and scale. Where non-TOU customers are also present, retailers would be expected to incur the higher reconciliation costs. For the majority of the time, TOU volumes require only one allocation, while non-TOU volumes require three allocations due to time allowed between meter reads. Under the volume-based approach, non-TOU customers do not pay the commensurate share of administration costs their market segment is creating. Their retailers therefore have little incentive to keep costs down and implement efficiency improvements in their systems and processes. Vector is willing to support a solution that would better meet the cost-setting principles of equity and efficiency compared to the existing arrangement. This would provide greater assurance that all retailers are paying the costs proportionate to the burden of work they are creating and not 'subsidising' other retailers. Cross subsidisation between retailers is neither fair nor efficient. Vector recommends that any changes to the apportionment of ongoing costs are implemented before changes to NZX's allocation system. This would ensure that these associated costs are fairly apportioned under the new cost structure.

QUESTION	VECTOR'S COMMENTS
Q18: Do you agree that AG1 and AG2 data should only be treated preferentially when actual TOU data are being supplied? Which option do you prefer for addressing missing TOU data?	Vector prefers Options 1 and 4 to address missing TOU data. Option 1 (eliminating the 'triple jeopardy') would significantly reduce compliance costs. Option 4 (permitting TOU estimates in specific circumstances when the appropriate methodology is used) would provide flexibility for retailers to provide estimated TOU data where actual TOU data is not available due to a metering problem, provided the problem will be addressed in a timely manner. The proposed waiver process (Option 4, second option), however, is unnecessary if clear pre-defined scenarios and estimation criteria are established for TOU data. To achieve consistency across retailers in making TOU consumption estimations, Vector proposes the development of an industry guideline for estimating data (for example, a standard methodology in making monthly consumption estimations), similar to that recently developed for gas billing factors. The advisory group proposed for this review should consider this.
Q19: Do you agree that meter owners should have more obligations under the Rules? Do you agree that some of the obligations placed on retailers would be more appropriately placed on meter owners?	Vector does not agree that meter owners should have more obligations under the Rules. Metering is a competitive service. Retailers can readily negotiate commercial arrangements with meter owners to ensure retailers meet their obligations under the Rules. If a meter owner is not prepared to accommodate such arrangements, the retailer can select an alternative meter owner that will. Obligations should be placed on the party best able to address or manage a problem. Retailers alone hold the agreement with the end consumer on which

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	most of the obligations they are looking to place on others rely. Without the retailers’ agreement with their customers, the meter owner and network company have no rights to access their equipment installed on the end consumer’s property, except during an emergency. This places at risk these parties’ ability to meet their regulatory and contractual obligations, in particular, interference and maintenance of metrology accuracy as required by NZS 5259, compliance with which is required under the Rules.
Q20: If you have been or are regularly notified of a breach of Rule 39 by the Allocation Agent, is there a problem you can identify with the Rules or with the Registry that could be changed without compromising the intent of the downstream reconciliation process?	Vector does not see the need to amend Rule 39 at this point.
Q21: Do you agree that exemptions should only be permissible where there is a reasonable substitute available that achieves the intent and purpose of the Rules or in an “exceptional circumstance”? What sort of situations do you believe would warrant an “exceptional circumstance”?	Reducing the number of exemptions would help achieve certainty and consistency for market participants. However, exemptions should still be allowed under “exceptional circumstances”. While the Rules will be considered as carefully as possible, there are likely to be unforeseen issues that need to be addressed arising from, for example, technological changes (eg the deployment of smart meters) or more efficient practices that have become widely accepted in the industry. A recent example would be the exemption granted to Vector Transmission from the application of Rule 41 in certain circumstances to allow corrected data to be treated as “actual” data by the Allocation Agent. While the thresholds for exemptions could be set higher, it would be prudent to retain some room for flexibility as no one can totally foresee the future.

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	Exceptional circumstances should cover new processes that provide better quality data or where the costs of complying with the Rules override purported benefits. If the Rules are amended to more clearly and effectively express their intent, there should be little need for numerous exemptions.
Q22: If Gas Industry Co removes the exemption provisions, are there specific circumstances or situations that you believe warrant consideration for specific rule amendments now so as to remove the requirement for a future exemption?	The GIC should codify the exemptions below, which are not addressed in the Options Paper: • Vector Transmission's exemption from Rule 42, which requires the provision of unvalidated daily energy quantities on all days for all gas gates. Similar to our response to Q14, the significant cost of installing SCADA or telemetry equipment at small gas gates outweighs any benefits. • Vector Transmission's exemption from Rule 41 in certain circumstances to allow the application of metering corrections. In most cases, Vector Transmission's validation and correction processes provide higher quality data than the Allocation Agent's estimates, providing a more optimal outcome for industry. • Vector Transmission's exemption from Rule 41, which does not require Vector to submit actual daily energy quantities to the Allocation Agent for gas gates that are unmetered or have oversized meters.

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Q23: Given the Rules are unlikely to be reviewed again in the near future, are there other issues you would like Gas Industry Co to consider before a Statement of Proposal is released for consultation? Please be specific with your suggestion(s) and where possible provide supporting evidence.	The GIC should consider codifying existing practices and exemptions that will provide clarity and greater consistency to market participants in respect of these issues: • the current 200GJ threshold for Rule 37.2 breaches should be codified to prevent the requirement for a breach to be raised. The current process of raising a breach that is automatically deemed immaterial is inefficient; • Vector Transmission's exemption from Rule 42 for gates without telemetry/SCADA, for the reasons stated in our response to Q22; • Vector Transmission's exemption from Rule 41 to allow the application of metering corrections, for the reasons stated in our response to Q22; • Vector Transmission's exemption from Rule 41, which does not require Vector to submit actual daily energy quantities to the Allocation Agent for gas gates that are unmetered or have oversized meters; and • the Billing Factors Guideline, to improve the overall consistency and accuracy of consumption submissions under the Rules. In addition, the GIC should consider removing the Allocation Agent's obligation to estimate daily injection data for direct connect gas gates as this data is not required under the Rules or the Vector Transmission Code.
Q24: Do you agree with the proposed timeframe for implementing any rule changes?	Vector agrees with the proposed timeframe, which would enable the revised Rules to be implemented from October 2013.

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	To provide further certainty for market participants, particularly in cases where the new/amended Rules give rise to unintended consequences that are not consistent with the Rules’ objectives, we recommend the addition of a provision stipulating a regular review of the Rules, say every five years, or as necessary. Vector believes another consultation on some of the proposed options is necessary before a Statement of Proposal is made, eg more details on the proposed alternative algorithm, assessing whether D+1 data would be more accurate than current practice, ensuring consistency of proposed measures with other Rules, and new proposals that will be raised by stakeholders in response to this consultation. This interim consultation could alternatively be undertaken through the proposed advisory group for this review.
Q25: Do you consider that creating an advisory group similar to the GART is worthwhile for the purposes of developing rule changes as a result of this policy review?	Vector considers it worthwhile to create an advisory group for the purposes of developing changes to the Rules and to particularly consider their implementation. Vector would be happy to provide nominations should such a group be formed.