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31 August 2012

Ian Wilson
Gas Industry Company
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Dear Ian

Submission on Gas Governance Issues in Quality

Introduction

1. Vector Limited ("Vector") welcomes the opportunity to make this submission on the Gas Industry Company's ("GIC") consultation document, *Gas Governance Issues in Quality: Investigation Update*, dated 1 August 2012. Responses to the GIC's questions are provided in the Appendix.

2. No part of this submission is confidential and Vector is happy for it to be made publicly available.

3. Vector's contact person for this submission is:

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Industry arrangements

4. Vector reiterates that the regulation of governance arrangements in relation to gas quality is unwarranted, and supports the GIC's decision not to adopt a regulatory approach at this time.[1]

5. The contractual arrangements in relation to gas quality in the Vector Transmission Code, the Maui Pipeline Operating Code, and Vector's Interconnection Agreements are robust, well understood, and very clear as to the relevant parties' obligations,

[1] Vector expressed this view in previous submissions to the GIC: http://www.vector.co.nz/sites/vector.co.nz/files/11Vector%20Submission%20-%20Gas%20Distribution.pdf and http://www.vector.co.nz/sites/vector.co.nz/files/10Vector%20Submission%20-%20Gas%20Quality.pdf.

responsibilities and liabilities in relation to gas quality. As a matter of practice, Vector has zero tolerance for non-Specification gas entering its transmission and distribution systems, and takes action as soon as any issue comes to its attention.

6. As the GIC itself indicated, its investigation "gives no reason to doubt that the gas quality is being managed by parties in the physical supply chain in a rigorous and professional manner". This makes more prescriptive arrangements, which are not costless to implement, unnecessary. Vector sees no good reason for replacing the current contractual arrangements with a regulatory solution.

7. In addition, and as recommended by the GIC, there are opportunities for new industry arrangements to address the GIC's objective of improving transparency in gas quality. Vector is engaging with retailers on their proposed Gas Information Exchange Protocol that sets out arrangements for the sharing of safety-related information.

Gas quality information disclosure

8. The quality standards of gas transmission and distribution businesses regulated under Part 4 of the Commerce Act ("the Act") may be subject to scrutiny through the Act's Information Disclosure ("ID") regime. The final ID requirements are expected to be released by the Commerce Commission ("the Commission") in late September 2012.[2]

9. The GIC should not impose additional disclosure requirements outside of the Part 4 regime, to ensure Part 4 ID requirements meet both regulators' needs, and avoid overlaps and unnecessary compliance costs. Vector is aware that the GIC has been engaging directly with the Commission in relation to Part 4/ID.

10. Vector encourages the GIC to coordinate with the Commission regarding Information Disclosure requirements in relation to gas quality before considering regulation.

Yours sincerely

Bruce Girdwood
Manager Regulatory Affairs

[2] http://www.comcom.govt.nz/gas-information-disclosure/

Appendix: Vector's responses to specific questions

Question	Vector's comment
Question 1: As far as you are aware, are the requirements and current practices for controlling gas quality described accurately? If not, please explain why not.	In relation to the "occasional excursions" from the Gas Specification referred to on page 13 of the consultation document, Vector would like to emphasise that it has zero tolerance for non-Specification gas, and it takes action as soon as any such issue comes to its attention. The section on "Gas contaminants" (page 13) is mainly about compressor oil while a section of the same heading (page 20) contains a reference to dust as well as compressor oil carry-over. The description of gas quality control on pages 12-13 should mention pipeline dust control by filtration at Delivery Points. The last paragraph on page 13 describes "other compressors" as "reciprocating oil-injected machines". Vector notes that these machines are not "oil-injected". That term relates to specific types of compressors (e.g. screw compressors used in refrigeration service) that are not used on the transmission system. It would be more accurate to describe them as reciprocating machines that rely on coalescing filters to remove ANY lubricating oil CARRY-OVER [emphasis added]. The next sentence should also be amended to read: "Vector Transmission compressors located at the Kapuni Gas Treatment Plan are reciprocating compressors", to clarify the ownership and function of these compressors.
Question 2: As far as you are aware, are the requirements and current practices for monitoring gas quality described accurately? If not, please explain why not.	Vector agrees with the GIC's assumption, under section 3.1, that Section 5.3 of the Gas Specification contemplates that testing need not be continuous.

Question	Vector's comment
	Section 5.4 of the Gas Specification further confirms this by allowing the frequency of tests to be lowered for components demonstrated to be non-existent or exist at very low levels relative to the specified limits. *Requirement to monitor gas quality* In Table 2 (pages 16-17), there are two separate lines for neo-pentane, with a nil entry in one of the columns. These two lines should be aligned to accurately indicate that monitoring is being done for gas entering both the Maui Pipeline and Vector Pipeline. *Current gas quality monitoring practice* Strictly speaking, Vector reports Specific Gravity ("SG") rather than Relative Density, though the two are equivalent. At the biggest Delivery Points, e.g. for power stations, "finished" energy quantities are determined by the Metering at the Delivery Point. By contrast, in respect of other Delivery Points, "finished" energy quantities are determined back in the office. In both cases, the relevant process is the determination of gas compressibility, a parameter that must be applied in order to convert measured gas volumes to volumes at standard conditions (i.e. scm). While the same method is used to determine gas compressibility in respect of all Delivery Points (namely the AGA 8 method), different inputs and a different process are used at different types of Delivery Point.

Question	Vector's comment
	At Delivery Points where there is a gas chromatograph, full-component analyses of the gas passing through the Delivery Points are used as input to the AGA 8 calculation in the flow computer on site. For other Delivery Points, daily average values of CO_2, N_2 and SG for the relevant gas type are used as inputs to the AGA 8 calculation module built into Vector Transmission's energy calculation system, back in the office. AGA 8 can accept up to half a dozen different sets of inputs, the old NX-19 inputs being just one. The three parameters, CO_2, N_2 and SG, were (historically) the required inputs to the former method used to determine gas compressibility, i.e. NX-19. For the time being at least, these same inputs are still used in calculations for the majority of Delivery Points. Vector has always published values of these three parameters (along with gross calorific value) for each of the defined gas types on the transmission system. Its purpose is to enable retailers to determine gas compressibility as part of their own gas billing calculations. Of these parameters, only SG (or Relative Density) is a "gas quality" measure per se. By making these parameters available, Vector does not consider it is publishing anything in relation to gas quality. With the single exception of Relative Density (and even then not in all cases), none of the parameters mentioned in Table 1 of NZS:5442 are required or involved in the determination of gas quantities by Vector's gas transmission energy calculation system. Calorific value is certainly used to convert standard volume to energy.

Question	Vector's comment
	However, it is not a gas quality parameter, and is not one of the gas quality measures referred to in Table 1 of NZS:5442. On pages 19-20, the list of gas chromatograph locations should include the Vector-owned gas chromatograph located on the pipeline immediately downstream of the Kapuni Gas Treatment Plant.
Question 3: As far as you are aware, are the requirements and current practices for reporting gas quality described accurately? If not, please explain why not.	The title of section 4.1, "Requirement to report gas quality", does not fit with the contents that follow. A title like "Reporting gas quality concerns" would be a better description of this section. On page 22, second to the last paragraph, Vector would like to clarify that it requires access to such information in order to be able to (if it needs or wishes to) perform metering calculations and not to monitor gas quality. On page 23, paragraph 3, it is worth noting that Shippers who might want to avail themselves of these provisions should only be those not actually buying gas at the particular Receipt Point, but who nevertheless might think themselves affected by such gas. Any Shipper that does buy gas at a Receipt Point should cover gas quality in its gas purchase contract, and have rights to seek information and remedies under its own contract with the producer. Such Shippers should (ie, where appropriate, taking into account location and other relevant factors) contact their gas supplier/producer in the first instance if they have gas quality concerns.

Question	Vector's comment
Question 4: Do you have any comment on regulatory amendment described in section 4?	Vector has the following comments on the various points in section 5.2 of the consultation document: • Table 4, "Monitoring" and "Reporting" by Distribution networks – Vector Distribution monitors and reports monthly (via Vector Transmission) the level and concentration of gas odour. It undertakes monitoring at a selection of gate stations, district regulator stations, and ICPs. This will be reflected in Vector's Gas Distribution Asset Management Plan ("AMP") and will be a requirement of Vector's Safety Management System. • Bullet point 1 – Vector disputes the statement that "[p]arties in the physical supply chain—producers and line businesses—will wish to minimise their risk exposure, so are unlikely to offer wholesalers and retailers strong gas quality commitments in their supply and service contracts". The GIC is mistaken in lumping producers and line businesses together, thereby implying that Vector Transmission has the same views, incentives and roles as gas producers. That is not necessarily the case. Vector Transmission is most concerned to ensure that non-Specification gas does not enter its pipeline, not the least reason being that once it is in our pipeline, there is no practical way of getting it out; it will sooner or later reach consumers. For that reason, and also to protect pipelines themselves from the harmful effects of some potential contaminants, Vector's ICAs are unequivocal: the producer/interconnected party must inject only Specification Gas.

Question	Vector's comment
	Furthermore, and contrary to the GIC's assertion, Vector Transmission offers strong commitments to its customers (i.e. Shippers/retailers and/or end-users) in the VTC in relation to gas quality. For example, the VTC states that any interconnection agreement will commit the interconnected party to inject only Specification Gas; Vector and the Shippers mutually agree that any gas sale or purchase contract where the gas involved passes through the a Vector Transmission pipeline must state that the gas shall be Specification Gas. • Bullet point 2 – Vector disagrees that "[r]etailers and wholesalers do not always have strong negotiating leverage with...line businesses". In fact, wholesalers and retailers are large businesses that have the wherewithal to negotiate on a "level playing field" with lines businesses and protect their respective commercial interests. That is particularly true in the present "buyers market" for gas. It should be noted that the actions of Vector's gas transmission and distribution businesses are constrained, as they will be subject to comprehensive price and quality regulation, in addition to the Information Disclosure requirements referred to in the attached letter, once Part 4 of the Commerce Act is implemented. • Bullet point 5 – Vector confirms that it has no objection to releasing the ICAs, subject to the agreement of the relevant counter-parties. • Bullet point 8 – The reference to "insufficient warning" is a purely technical matter. The producer has the ability to stop the gas flowing as soon as its instruments detect non-Specification gas.

Question	Vector's comment
	• Last bullet point – Non-specification gas is also a safety issue. A producer can flare non-Specification gas if need be. Vector's transmission system is not an alternative disposal system. Vector's ICAs are unequivocal that Non-Specification gas may not be knowingly injected, and Vector does not want it.
Question 5: Do you have any comments on the discussion in relation to the monitoring of gas quality?	Vector believes paragraph 3 under section 5.3 is a misreading of NZS:5442. As indicated above, Section 5.3 of the Gas Specification contemplates that monitoring need not be continuous. Vector Transmission would like to clarify that its ICA (section 7.10(h)) provides that continuous monitoring of O_2 and H_2S is not necessarily required. Its ICA further provides (section 7.10(h)) that quarterly monitoring of gases identified in the second bullet point is not necessarily required.
Question 6: Do you have any comments on the discussion in relation to the reporting of gas quality?	In section 5.4 of the consultation document, the GIC states that "[r]etailers find it difficult to confirm compliance with some of the obligations because they rely on parties in the physical supply chain to control and monitor gas quality". Vector notes that no Shipper/retailer could possibly claim that Vector has ever accepted such a responsibility, except in relation to "contaminants" specifically within Vector's control. The implied general inclusion of Vector in this statement should be amended so as to refer to gas producers only in respect of gas composition/quality.

Question	Vector's comment
	As indicated in the attached letter, there is a risk that imposing additional gas quality reporting requirements on businesses already subject to Information Disclosure requirements under Part 4 of the Commerce Act may create overlapping requirements. Vector strongly suggests that the GIC "make haste slowly" in this regard (given that existing arrangements are working) while the part 4 Information Disclosure requirements are still being finalised, to avoid unnecessary compliance costs.
Question 7: Do you think we have correctly identified the opportunities for improvement?	As indicated in the attached letter, Vector is engaging with retailers on their proposed Gas Information Exchange Protocol. Vector is willing to provide retailers with a copy of its Safety Management System audit certificate as an initial action. In addition, the Part 4 ID requirements are anticipated to be a step change in the disclosure of information by regulated businesses. For the first time, regulated businesses will be required to publicly disclose comprehensive information through their AMPs. The Gas AMPs are expected to be released for the first time in 2013. With regard to the excursions of non-Specification gas (section 6.2 of the consultation document), Vector emphasises that it has never tolerated nor has it ever wanted non-Specification gas in its transmission and distribution systems. The GIC suggested the possibility of adopting the Australian Energy Market Operator's "guidelines to cover short-term gas quality excursions outside of the gas quality specifications". Vector does not consider any further work on gas

Question	Vector's comment
	quality governance by the GIC necessary. However, it reserves the right to make comments on this particular proposal until it has been extensively explored by the GIC and industry.
Question 8: Do you agree with our recommendations in relation to gas quality?	In relation to Recommendation 4, Vector could demonstrate how much sulphur is added via injection of odorant. Vector is not able to demonstrate the amount of total sulphur already in the gas and therefore cannot demonstrate the total amount. Vector supports the GIC's observations that its investigation suggests that "gas quality monitoring is generally being carried out in accordance with the Gas Specification and ICAs" and "it appears that little benefit would be derived by TSOs installing additional gas quality monitoring equipment". Vector further supports the GIC's decisions to put its work on gas quality incident reporting on hold and reassess its review of liability arrangements, subject to the outcome of the retailers' proposed Protocol. Importantly, the GIC should exercise caution in imposing further gas quality regulatory requirements, which Vector believes is unnecessary, before the Information Disclosure requirements under Part 4 of the Commerce Act are finalised and are well understood, to avoid unnecessary overlaps and duplication. Vector urges the GIC to err on the side of caution as the cost of regulatory error is high, particularly where the arrangements in place are working. There is a risk of "gold-plating" the system (i.e. spending more than what is necessary to essentially meet the same requirements, which is inefficient), the costs of which are ultimately borne by consumers.